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ABSTRACT

The main aim of this paper is to analyze Tanzania's educational policy. Its starting point is an examination of the strong interrelationship between the country's educational policy and its social and economic objectives. How the educational policy has been implemented, how the various levels and types of education have developed, and what the trends of expenditure and costs have been are presented. An attempt is made to see how the educational system might evolve on the basis of its own dynamic, on the basis of changes being contemplated at present, and on the basis of the government's long-term objectives. Finally, the effect of this development on costs and expenditures is assessed. At present all educational expenditures are financed by the central budget. The increase in educational expenditures will, therefore, depend largely on the trends of public revenue and on the allocation of public resources to the various functions of the state. (Author/IRT)

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Financing educational systems: country case studies

4

International Institute for Educational Planning

Educational policy and its financial implications in Tanzania

Ta Ngoc Châu and Françoise Caillods

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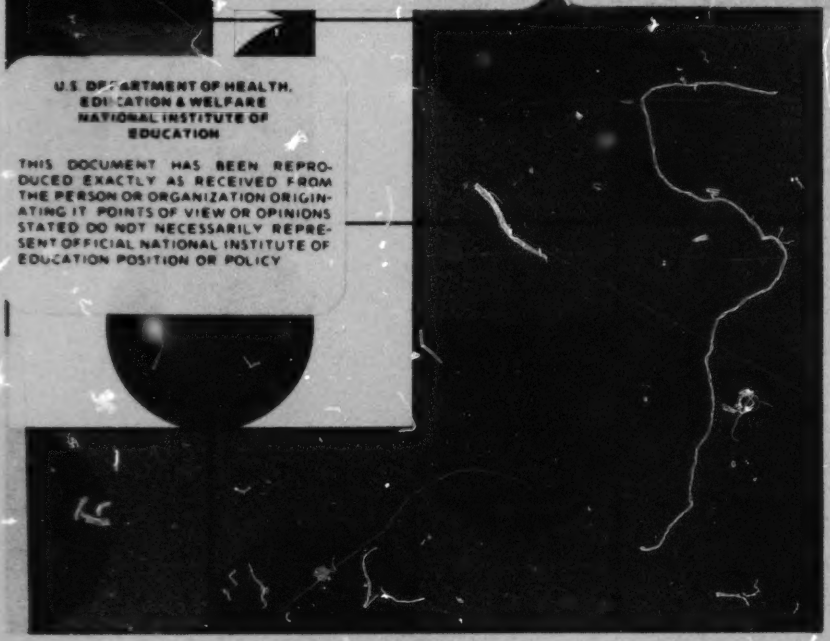

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Educational policy and its financial implications in Tanzania

Ta Ngoc Châu and Françoise Caillods

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Aims and methodology of the IIEP research project on financing educational systems

This research project, launched by the International Institute for Educational Planning early in 1970, originated in an inquiry as to the real possibility of the developing countries financing their educational objectives in the course of the United Nations Second Development Decade, bearing in mind the high level of expenditure thas has already been reached in most cases, the constant rise in unit costs, and the increasing competition within the state budgets themselves that education will probably encounter in the future from the financing of productive investments, debt servicing, and other predictable expenditures.

Viewed in this light, therefore, the research is not strictly limited to the study of financing techniques, but has wider aims:

1. To explore the real weight of probable financial constraints on the development of educational systems up to 1980.
2. To study the various financing methods likely to augment resources, and to define a strategy of educational financing more closely adapted to social and economic realities.
3. To analyse certain alternative solutions (new structures, new technologies, etc.) capable, by reducing costs or improving the efficiency of the teaching process, of leading to a better balance between educational targets and the resources available for them.

In addition to these extremely concrete objectives, concerned with the real problems facing educational planners in all countries, the collation of the essential data should provide the basis for the answers to more theoretical questions, affecting, for example, the type of correlation between educational expenditure and the level of development, between the level of expenditure and the method of financing, between the level of unit costs and the development of the educational system, etc.

With these aims in mind, two types of study are being undertaken:

1. *National case studies* for the *retrospective* (1961–70) and *prospective* (1980 or beyond) analysis of the expenditure, financing and costs of educational systems in the widest and most representative possible sample of countries—at least fifteen; these studies should, as already stated, reveal both the magnitude and the nature of the financial constraints to be expected in the

general framework of the development of the economy and of the finances of the state, and the level and various alternative forms for the possible development of educational systems. These studies will thus cover the whole field of educational financing, costs, and policies in each country concerned.

2. *Specific case studies* covering, first, the different possible methods of financing (centralized, decentralized, public, private, etc) and, especially, original ways of raising supplementary resources, and, secondly, the study of new educational solutions calculated to reduce costs.

These studies are being carried out in Member States by the IIEP in close collaboration with national specialists, either from government departments or from universities; in many cases the research is a concerted effort by the IIEP and the country concerned, for the common benefit of both parties and of the international community as a whole.

This project will culminate in a synthesis report summing up the findings relating to all the problems posed. The studies themselves are being published as single monographs in the collection *Financing educational systems*, comprising two series, one of country case studies and one of specific case studies.

The financial outlay for the implementation of this ambitious project could not be provided from Unesco's basic grant to the Institute. The IIEP is deeply grateful to the Member States and various organizations who, by their voluntary contributions, have enabled it to launch and pursue this research: in particular to SIDA (Swedish International Development Authority), NORAD (Norwegian Agency for International Development), DANIDA (Danish International Development Agency), CIDA (Canadian International Development Agency), the Republic of Ireland, and the Ford Foundation. The Institute is also deeply indebted to the Member States and national specialists in various parts of the world who have agreed to co-operate with the IIEP in carrying out these studies. The publication by the IIEP of certain studies by outside consultants does not necessarily imply, however, the Institute's agreement with all the opinions expressed in them.

Preface

Among the African countries which have become independent during the past decade, Tanzania is one of those which have most clearly laid down the lines of development to be followed. Tanzanian authorities are well aware of the implications of development and have assigned an important rôle to education. It is therefore logical that educational policy should have a privileged position, as it is closely related to the policy of economic and social development.

In fact, educational policy was taken as the starting-point for this case study on the financing of education by Ta Ngoc Châu and Françoise Caillods. To understand it fully, one must appreciate the situation of education in Tanzania at the time of independence. In 1961 less than two children out of five were admitted into the school system, and most of those admitted spent little more than four years in it. Moreover, these first four years, constituting lower primary education, were organised on the half-day system, with the same teacher taking two different classes one after the other. The transition rate from lower to upper primary was barely 20 per cent and at the end of upper primary a further selection for entry into secondary education took place. Less than 5,000 pupils succeeded in passing this hurdle; and those admitted into upper secondary numbered less than 300. In other words, not only was access to education restricted to a small proportion of children, but selection was also very rigorous. It should be added that these overall figures refer, in fact, to three parallel educational systems, reserved respectively for Europeans, Asians and Africans.

One of the first measures taken by the Tanzanian Government after independence was to integrate these three systems. The shortage of staff in all fields was, however, so great that the interim plan and the first five-year plan concentrated mainly on secondary and higher education. The second five-year plan marked a change of direction. The development of secondary and higher education is to continue, but only to the extent necessary to meet the manpower requirements for economic growth. Priority is now to be given to primary education, in an attempt to make it more adapted to its environment and to the country's needs. At the same time, a new impetus is to be given to adult education, in particular to problems of illiteracy and agricultural extension work, health education, and political awareness. All these attempts involve

re-thinking curricula, changing the attitudes of teachers and pupils and extending basic education for children and adults, in order to promote mass education and thereby strengthen national unity and assist national development. The integration of school and community via community education centres, the parallel development of primary and adult education, often with the same teachers and in the same premises (the school remaining the core of the educational system), the extension of Swahili as a teaching language and the rôle assigned to education in *ujamaa* village construction programmes, all point to the same concern: that schools should serve development and be increasingly integrated into the community.

This emphasis on mass education is founded on the conviction that development, to be real, must be rooted in the self-awareness and efforts of the Tanzanian people. It is also closely linked to the priority given to improving the standard of living of under-privileged groups rather than to promoting growth which would benefit only a small minority.

This policy has many implications and one of the merits of this study is to have clarified them. Only two, which we feel are of particular importance, will be discussed here.

The first concerns the problem of access to secondary and higher education. While primary education is to be progressively, extended, access to the higher levels will be strictly governed by the size of the qualified labour force needed for economic growth. We do not propose to deal with the difficulties and uncertainties of projecting manpower requirements here. What can perhaps be stressed is that, according to the projections of the Division of Labour in the Ministry for Economic Affairs and Development Planning and even in the event of regular economic growth at a relatively high rate, the increase in the need for qualified labour will be rather limited, owing to the structure of the labour force and in particular to the fact that a mere 8 per cent of this labour force is employed in the secondary and tertiary sectors.

The implementation of this policy means that the already small number of children able to enter secondary schooling at the end of primary education will be even smaller in the future. To be more precise, the transition rate from primary to public secondary education (including teacher training), which had already fallen from 40.1 per cent in 1961 to 16.3 per cent in 1972, will drop even further, to 6.9 per cent in 1980. It is obvious that this drop is due not to a slackening in the development of secondary education but rather to the more rapid expansion of primary education and more especially to the fact that selection, which had been carried out at two different stages, (in the first place at the end of Standard IV and then at the end of Standard VII), will now take place only once—seven-year basic education thus being assured for everybody. What will be the reactions to this increasingly strict selective entrance system? Is there not a risk that this will lead to an élitist system? This is where politics will have an essential rôle to play. The trend in recent years seems to indicate, however, that this selection for access to public education has caused private secondary education to expand rapidly, with enrolments rising from less

than 5 per cent to almost 25 per cent of total enrolments between 1965 and 1972.

The second policy implication concerns the financial problems. Tanzanian authorities are well aware of existing financial constraints and these partly presided over the elaboration of education policy. President Nyerere himself declared:

> "The truth is that there is no possibility of Tanzania being able to increase the proportion of the national income which is spent on education... Therefore, we cannot solve our present problems by any solution which costs more than is at present spent; in particular, we cannot solve the problem of primary school leavers by increasing the number of secondary school places...
>
> Unpleasant though it may be, the fact is that it is going to be a long time before we can provide universal primary education in Tanzania: for the vast majority of those who do get this opportunity, it will be only the equivalent of the present seven years' education. It is only a few who will have the chance of going on to secondary schools, and quite soon only a proportion of these who will have an opportunity of going on to university... The only choice before us is how we allocate the educational opportunities and whether we emphasize the individual interests of the few or whether we design our educational system to serve the community as a whole".[1]

This study by Ta Ngoc Châu and Françoise Caillods contains a detailed analysis of the growth of expenditure caused by the very dynamics of the educational system and also by the implementation of the educational policy outlined above. This retrospective and prospective analysis takes the country's economic and social development policy as its general framework—a method which can be justified in the case of Tanzania, where the State has decided to play a considerable rôle in this area. This preface does not propose to summarise the authors' assumptions on economic growth, the latter's effects on public resources, its implications for the use of these resources, for the state of the external and internal debt, for the future of foreign trade or for the problem of the compatibility of educational objectives and the other objectives of economic and social developement. It is, however, worth noting that, despite the caution and realism shown by Tanzania in determining these objectives (the second five-year plan allows twenty years for the progressive extension of admission to primary education by raising the admission rate from 45 per cent in 1969 to 95 per cent in 1989), despite the control on entry into secondary education on the sole basis of the need for qualified manpower, and despite the restricting assumption of maintaining the salary scale at its present level, educational expenditure will nevertheless increase rapidly in the future and will drain an increasingly large share of state resources and of the Gross Domestic Product. It is expected that in 1980, for instance, educational expenditure will amount to almost 30 per cent of government expenditure (exclud-

1. Julius K. Nyerere, 'Education for Self-Reliance', in *Ujamaa, Essays on Socialism*, Nairobi, Oxford University Press, 1968, pages 60-61.

ing expenditure resulting from the public debt service) and to 5.5 per cent of the total Gross Domestic Product.

This somewhat surprising situation is due to a variety of factors, which the authors analyse in detail. These factors concern the level and range of teachers' salaries (relative to those of other occupational categories) and their repercussions on the level and structure of unit costs, and also the policy of extending the boarding-school system at the secondary level. Here again, Tanzanian authorities consider this policy to be fully justified, arguing that recruitment for secondary schooling should be carried out on a nation-wide rather than a local basis in order to improve national unity. Nevertheless, this policy involves high costs, hardly offset by 'self-reliance' activities which are promoted on a large scale.

A comparison between the results set out in this study and those contained in others undertaken by the IIEP in several other countries reveals how the same objective can involve very different kinds of expenditure according to the structure of the educational system, the level of teachers' salaries, the means of financing education, the nature of state resources and the characteristics of the economy.

The IIPE is extremely grateful to the Tanzanian authorities for their generous assistance, and to the specialists in the Ministry of National Education and in the Ministry for Economic Affairs and Development Planning for their extensive contribution to this study.

R. POIGNANT

Contents

General data about Tanzania 13

Introduction 15

PART I: THE TANZANIAN EDUCATIONAL POLICY: IMPLEMENTATION IN THE PAST AND PROSPECTS FOR THE FUTURE 17

An overall view of Tanzania's educational policy 18

Past development of education 27

The situation of education prior to independence 27
The development of education since independence 28
Increases in enrolments in the various levels of education in recent years 30
Trends of educational expenditure and sources of finance 48

Projection of educational expenditures during the present decade . . 54

Projection of enrolment 54
Projection of recurrent expenditures 66
Projection of capital expenditures 73

PART II: THE FINANCING OF EDUCATION EXPENDITURES: PAST SITUATION AND PROSPECTS UP TO 1980 75

Introduction 76

Economic growth: past trends and prospects for the 1970s 77

Economic growth during the first and second five-year plans . . . 77
Growth by sector 81
Capital formation 86
Foreign trade 91

Prospects for economic development during the present decade . . . 98

Financing of capital formation during the second five-year plan . . 98
Movements in the balance of payments during the second five-year plan . 102
Economic growth during the 1970s 107

Public revenue and educational expenditures 112
Government revenue 112
Projection of government expenditures 116

Conclusions 123

Appendix 127

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This report has been prepared from materials supplied by the Ministry of National Education and from the findings of several research missions in Dar es Salaam carried out in 1972 and 1973. The Institute is very grateful to the Ministry of National Education and the Directorate of Planning and Development for their co-operation and assistance. Although traditionally the work of civil servants should not be acknowledged in public, special mention should be given to the names of M. Kinunda, Commissioner for National Education, R. Mayagila, Director of the Sectoral Planning Unit, E. Mallamia, Project Co-ordinator, IDA Project Unit, and J. R. Carter, University Planning Officer, who not only gave their help and advice but also participated actively in the preparation of the paper.

General data about Tanzania

Tanzania is situated in East Africa along the Indian Ocean, bordered on the north by Mount Kilimanjaro and Lake Victoria, on the west by Lake Tanganyika and on the south by Lake Nyasa. The country covers an area of 362,000 square miles (including Zanzibar and Pemba).

Population

Population was estimated at 13 million in 1970; the annual rate of growth averages 2.7 per cent. Most of the population lives in the rainy part of the country and less than 5 per cent is urbanized.

The official language is Swahili but English is the primary language used in commerce, industry, administration and higher education.

Gross national product

The principal cash crops of Tanzania are coffee, cotton, sisal, cashew nuts, tea and sugar. In the tropical coastal areas crops such as cocoa, coconuts and bananas are produced and in the highlands maize and wheat are cultivated mainly for internal consumption. Livestock raising plays an important part in the agricultural economy.

Diamonds, gold, tin and salt are the most important minerals, but petroleum from crude oil has become a major export item. The distribution of gross national product (GNP) at factor costs by industry in 1972 is shown in Table 1.

The Tanzanian economy is predominantly agricultural. In 1964, agriculture alone represented half of GNP. Since then its share has decreased but is still sizable. The industrial sector is rather limited but its development has been fast. The same can be said about the service sector.

From 1964 to 1972 the growth of GNP at factor costs was 5.5 per cent per annum.

TABLE 1. Gross domestic product at factor cost by industrial origin (in million shillings)

Sector	Amount	%
Agriculture	3 956	40.2
Mining and quarrying	124	1.2
Manufacturing and handicraft	973	9.9
Electricity and water supply	107	1.1
Construction	501	5.1
Trade and tourism	1 280	13.0
Transport and communication	867	8.8
Finance and real estate	900	9.2
Public administration and other services	1 142	11.5
GROSS DOMESTIC PRODUCT AT FACTOR COST	9 350	100.0
Monetary sector	6 975	71.1
Subsistence sector	2 875	28.9

Structure of the educational system

First-level education in Tanzania lasts for seven years: four years in lower primary and three years in upper primary. Each grade is known as 'standard', beginning with standard I. Education in standards I and II is on a half-day basis.

At the end of standard IV there was a selective examination for entry into standard V; this is now being phased out. For standard VII there is another selective examination which determines those who will go on to general secondary-level education and lower-level teacher-training colleges.

After four years of general secondary-level education students sit for the National School Certificate. Those who are successful can proceed either to upper secondary schools or to technical colleges or to grade A teacher-training colleges.

Third-level education is provided at the University of Dar es Salaam, which has faculties of art, science, medicine, engineering and agriculture.

Introduction

Over the past decade, Tanzania has given priority attention to education. The important part that education has to play in economic, social and human development was clearly set out by President Julius Nyerere himself in his famous paper 'Education for self-reliance', which became, and still continues to be, the country's charter for development in the field of education. Significantly enough, one of the pledges of the members of TANU (Tanzania's political party) is: 'I will educate myself to the best of my ability and use my education for the benefit of all.'

Educational policy is, thus, a matter of vital importance, and this is clearly reflected in the increasing share of educational expenditure in both the national budget and the GDP despite the latter's relatively rapid growth. The educational progress achieved has been particularly encouraging to anyone who recalls what the situation was at the time of independence. The country's educational policy is an integral part of the broader strategy for social and economic development, and Tazania deserves special credit for having set out very clearly what its political options and its short- and long term objectives were to be.

The main aim of this paper is to analyse Tanzania's educational policy. Obviously this policy cannot be examined in isolation. This is particularly true for Tanzania, where the educational policy is so closely related to economic and social development. On the other hand, the problem of resource allocation between education and the other sectors of economic activity is of particular relevance in a country where the contribution by the public sector (including the parastatal firms) to gross capital formation has shown an uninterrupted increase, now accounting for more than two-thirds of the country's total investment.

Our starting-point therefore is the examination of Tanzania's educational policy, and in presenting it we will put the main emphasis on the strong interrelationship between the educational policy and the social and economic objectives of the country. We will then try to see how this educational policy has been implemented, how the various levels and types of education have developed and what the trends of expenditure and costs have been. We will try also to see how the educational system might evolve during the present decade, on

the basis of its own dynamic, on the basis of the changes at present contemplated and on the basis of the government's long-term objectives. Finally, the effect of this development upon costs and expenditures will be assessed.

How will the increasing educational expenditures be financed in the future? Here again it will be interesting to observe how the financing pattern has changed in the past. In recent years the trend has been towards a greater centralization of financing. At present, it can be said that nearly all educational expenditures are financed by the central budget. The increase in educational expenditures will, therefore, depend largely upon the trends of public revenue, and upon the allocation of public resources to the various functions of the state. Taking into acount the vital role played by the state in economic development, it seems difficult to study the financing of education without reference to it.

A retrospective study of the trends of economic growth in the past, of the way capital formation has been financed, of its effects upon external debt and the balance of payments may help to indicate what may be the economic prospects for the future. Needless to say, economic projections are always uncertain and even more so in developing countries where data on national accounts are not precise and where the economy is so dependent upon changes in world commodity prices. Such changes affect not only the absolute level of GDP but also the country's import capacity, and thereby its level of investment, since a large part of capital goods and equipment comes from abroad. In addition, the uncertainly of foreign aid and the length of the period under review make projections more hazardous. Consequently, the projection we are submitting is only and can only be the outcome of a set of plausible and coherent assumptions we have had to make on how the Tanzanian economy might shape in the future.

Taking into consideration the economic-growth prospects and their effects upon both the amount of public revenue and its allocation to the various sectors of government activities, we shall try to see whether the country's educational policy is compatible with the other objectives of economic and social development or—and this is not less interesting—under what conditions it could become so. It is evident that the way costs may move in the future, and in particular salary costs (since they account for a large share of educational expenditures), will be of vital importance. Of course, when examining this problem of compatibility between educational policy and the other economic and social development objectives, we will not restrict ourselves to the question of resource allocation and financial constraints. We shall also consider other aspects, notably employment. With this wider approach it should be possible, we hope, to draw interesting conclusions either on the Tanzanian educational policy itself or on the ways in which it could be financed.

Part I

The Tanzanian educational policy: implementation in the past and prospects for the future

An overall view of Tanzania's educational policy

One of the most prominent features of Tanzania's development, since independence in 1961, is a clearly formulated set of national objectives. These objectives refer to the development process as a whole and, in a certain sense, it is not possible to understand and discuss Tanzanian educational policy without looking at the broader context of economic and social development. For this reason, we have thought it useful to present these national objectives here and to show the extent to which the educational policy is closely related to them.

Tanzania has definitively adopted socialism. The paths towards socialism are, however, varied; they depend upon the situation and the circumstances, and the situation and the circumstances of Tanzania are specific. As President Nyerere out it:

We are Tanzanians and wish to remain Tanzanians as we develop. Certainly we shall wish to change very many things in our present society but these changes will be effected through the process of growth in certain directions. This growth must come out of our own roots, not through the grafting on to those roots of something which is alien to our society. . . .

'It means that our social change will be determined by our own needs as we see them, and in the direction that we feel to be appropriate for us at any particular time. We shall draw sustenance from universal human ideas and from the practical experiences of other peoples; but we start from a full acceptance of our African-ness and a belief that in our past there is very much which is useful for our future.'[1]

Tanzanian socialism is thus based on two basic principles: self-reliance and *Ujamaa*.

First, self-reliance is the clear recognition of the present situation: 'We in Tanzania must accept the realities of our present position, internally and externally, and then work to change these realities into something more in accord with our desires. And the truth is that our United Republic has at present a poor, underdeveloped and agricultural economy. We have very little capital to

1. Julius K. Nyerere, 'The purpose is man', in *Ujamaa, essays on socialism*, Dar es Salaam, Oxford University Press, 1968, pp. 91–92.

invest in big factories or modern machines; we are short of people with skill and experience. What we do have is land in abundance and people who are willing to work hard for their own improvement. If we use these resources in a spirit of self-reliance as the basis for development, then we shall make progress slowly but surely and it will then be real progress, affecting the lives of the masses, not just having spectacular show-pieces in the town while the rest of the people of Tanzania live in their present poverty'.[1]

However, self-reliance is also a positive affirmation that Tanzanians will depend on themselves for the development of Tanzania. 'They will not take the attitude that the Government, or Local Council, or anyone else, must come and do this or that for them before they can make progress. There will be things for which outside assistance in the form of skilled advice or a capital loan is necessary, but they will realize that this has to be paid for, directly or indirectly, by them and their fellow citizens. And outside capital assistance, in particular, will only be requested after all local development with local resources has been undertaken and only to the minimum extent necessary to effect their purposes.

'Self-reliance means choosing the path to development which does not depend upon outsiders. It means a recognition of international involvement and a willingness to give and to receive help. It means a recognition that outside assistance can help to speed up development along the path which we have chosen. But it also means that the path itself must be one which is within our resources.'[2]

Ujamaa is an attempt to return to and to draw the best from the traditional organization of African society in the pre-colonial period. To quote President Nyerere again:

'The traditional African family lived according to the basic principles of *ujamaa*. Its members . . . lived together and worked together because that was how they understood life and how they reinforced each other against the difficulties they had to contend with. . . . The results of their joint effort were divided unequally between them, but according to well-understood customs. And the division was always on the basis of the fact that every member of the family had to have enough to eat, some simple covering, and a place to sleep, before any of them (even the head of the family) had anything extra.

'This pattern of living was made possible because of three basic assumptions. . . . The first [one] is that each member of the family recognized the place and the rights of the other members, and although the rights varied according to sex, age, and even ability and character, there was a minimum below which no one could exist without disgrace to the whole family. . . . [The second assumption is] that all the basic goods were held in common, and shared among all members of the unit. . . . Within the extended family, and even within the tribe, the economic level of one person could never get too far out of pro-

1. Nyerere, 'Education for self-reliance', in *Ujamaa, essays on socialism*, op. cit., pp. 50–51.
2. Nyerere, 'After the Arusha declaration', in *Ujamaa, essays on socialism*, op. cit., p. 152.

portion to the economic level of others. . . . Finally, and as a necessary third principle, was the fact every one had an obligation to work. The work done by different people was different, but no one was exempt.'[1]

The gradual implementation of Tanzania's specific socialism led to two important decisions. The first was for the state to take over the ownership and control of the major means of production and exchange. This was particularly felt after the Arusha declaration (1967), when the banks, insurance companies, transport companies, hotels, main industrial enterprises, large agricultural estates, import and export trade, wholesale trade and sizable rental properties have successively been nationalized. At the same time, it was recognized that the gap between the urban and rural areas in terms of income, education, housing and social services had tended to widen. As a result, the second decision was to give more emphasis to rural development.

'Tanzania will continue to have a predominantly rural economy for a long time to come. And as it is in the rural areas that people live and work, so it is in the rural areas that life must be improved. This is not to say that we shall have no industries and factories in the near future. We have some now and they will continue to expand. But it would be grossly irrealistic to imagine that in the near future more than a small proportion of our people will live in towns and work in modern industrial enterprises. It is therefore the villages which must be made into places where people live a good life; it is in the rural areas that people must be able to find their material well-being and their satisfaction.'[2]

The means used for the implementation of rural development are radically different from those for industrial development. The key instrument here is the creation of *ujamaa* villages, which can be described in the following way:

'A group of families will live together in a village, and will work together on a common farm for their common benefit. Their houses will be the ones they build for themselves out of their own resources, their farm will be owned jointly, and its produce will be their joint property. The activities of the village, and the type of production they undertake, as well as the distribution of crops and other goods they produce, will all be determined by the village members themselves. . . . In other words we shall have an up-to-date, and larger, version of the traditional African family. . . .

'The size and composition of the group of people who live together will vary from one part of the country to another depending upon the soil, the appropriate crops or animal husbandry and the social customs of the people. But by living together and working together, all of them will be able to be better off. Instead of forty different families each living separately and each farming their own land, collecting their own water, they will come together and live in a village. Then, by their joint efforts, they will—in time—be able to bring water into the village, they will be able to build their children's school con-

1. Nyerere, 'Socialism and rural development', in *Ujamaa, essays on socialism*, op. cit., pp. 106–8.
2. Nyerere, 'Education for self-reliance', in *Ujamaa, essays on socialism*, op. cit., p. 51.

veniently near all of them; they will be able to build a community centre and a store for their mutual convenience and so on. Also, by working together . . . they will soon be able to take full advantage of skilled advice about modern methods: they will be able to increase their joint production and their joint prosperity. They will be able jointly to analyse the sale of their produce and the purchase of the goods they want to buy from outside. . . . All members of the community will be equal in status and any variations of income will reflect only differences in the amount of work done.'[1]

The creation of these *ujamaa* communities however 'does not mean that the government should build modern expensive houses and complete villages for the new settlers to move into. That assumption has been our mistake in the past.'[2]

'A very important fact about [the creation of Ujamaa communities] is that there is no necessity for great capital investment before they can start. They can be and . . . should be started by people using their own tools—the tools they use now on their individual plots. Often they themselves will be able to provide the seed for the community farm from their own stocks. . . . On that basis alone they can start, and the first year's profits from the community farm can then be used to purchase simple tools. . . . The important thing is that there should be no reliance on great outside capital injection.'[3]

Great emphasis is thus put on self-reliance and on the idea that this very method should be applied to modernization of agriculture:

'We have to modernize our farming if we are to improve our standard of living. But we cannot modernize by buying tractors for everyone. . . . We have to modernize by utilizing to the full the tools which are within our capacity to buy and to make; which are sufficiently simple for us to use without trouble and breakdowns; and which are appropriate to our present and near future social and economic organization. . . . The oxen-plough, the oxen-cart, the use of donkeys . . . all these things can make a tremendous improvement in our output and therefore in the lives of our people. We must move to these techniques with the maximum speed. Then, when we have effected this revolution all over the country, we shall be able to move from the oxen plough to the tractor.'[4]

The government's role is therefore mainly that of leadership. 'It is to help people to make a success of their work and their decisions. . . . Where a village community has been established, the Ministry of Agriculture and Co-operatives should ensure that necessary agricultural advice—about the best crops to plant on the community farm, and how to plant them for greatest success—is available to the villagers. . . .

'The Ministry of Local Government and Rural Development too, must be active in these villages; their field workers should be available to help the people to organize themselves, to advise them on how they can become eligible for advances for seed, or for small loans for farm equipment. . . .

1. Nyerere, 'After the Arusha declaration', in *Ujamaa, essays on socialism*, op. cit., pp. 172–73.
2. Nyerere, 'Socialism and rural development', in *Ujamaa, essays on socialism*, op. cit., p. 137.
3. Nyerere, 'After the Arusha declaration', in *Ujamaa, essays on socialism*, op. cit., pp. 141–42.
4. Nyerere, 'After the Arusha declaration', in *Ujamaa, essays on socialism*, op. cit., p. 151.

'But the most important thing is not that the government should do this or that for all villages, but that within its resources, it should give priority to requests which are received from villages where the people are living together and working together for the good of all.'[1]

In the same way as there are two interrelated development strategies, with different methods, to develop the industrial sector (by means of the parastatal enterprises) and to develop the rural areas (by means of the *ujamaa* villages), there are two main objectives for Tanzania's educational policy. These two objectives should complement each other and both should be a part of the overall economic and social development. The first one is to achieve localization[2] at all skill levels in the economy by 1980, and the second is mass education, both by a gradual implementation of universal primary education and by a rapid development of literacy programmes for adults.

The provision of secondary education, technical education and higher education should, however, be expanded only to the extent justified by the estimated manpower requirements of the economy for development.

'The truth is that there is no possibility of Tanzania being able to increase the proportion of the national income which is spent on education. . . . Therefore, we cannot solve our present problems by any solution which costs more than is at present spent; in particular we cannot solve the problem of primary-school leavers by increasing the number of secondary-school places. . . .

'Unpleasant though it may be, the fact is that it is going to be a long time before we can provide universal primary education in Tanzania; for the vast majority of those who do get this opportunity, it will be only the equivalent of the present seven years' education. It is only a few who will have the chance of going on to secondary schools, and quite soon only a proportion of these who will have an opportunity of going on to university. . . . The only choice before us is how we allocate the educational opportunities and whether we emphasize the individual interests of the few or whether we design our educational system to serve the community as a whole.'[3]

This controlled development of secondary and higher education, with close reference to the manpower requirements of the modern sector and the continuing expansion of primary education, means that the already low proportion of children who, after finishing primary education, can proceed to secondary education, will become even lower, that access to secondary education will become more difficult and that selection will be more severe. Will this situation lead to an élitist system? This danger is clearly recognized. It is hoped that it can be overcome by changing the curriculum, by reorganizing the schools, by fostering new values and attitudes among the students.

1. Nyerere, 'Socialism and rural development', in *Ujamaa, essays on socialism*, op. cit., pp. 142–43.
2. 'Localization' is current usage in Tanzania to signify replacement of expatriates by Tanzanian citizens.
3. Nyerere, 'Education for self-reliance', in *Ujamaa, essays on socialism*, op. cit., pp. 60–61.

'The education given in primary schools must be a complete education in itself. It must not continue to be simply a preparation for secondary school. Instead of the primary-school activities being geared to the competitive examination which will select the few who go on to secondary school, they must be a preparation for the life which the majority of the children will lead. .. . They must prepare people for life and service in the villages and rural areas of this country.'[1]

'We should determine the type of things taught in the primary schools by the things which the boy or girl ought to know—that is, the skills he ought to acquire and the values he ought to cherish if he, or she, is to live happily and well in a socialist and predominantly rural society, and contribute to the improvement of life there. Our sights must be on the majority; it is they we must be aiming at in determining the curriculum and syllabus. . . .[2]

'Alongside this change in the approach to the curriculum there must be a parallel and integrated change in the way our schools are run, so as to make them and their inhabitants a real part of our society and our economy. Schools must, in fact, become communities—and communities which practise the precept of self-reliance. . . . This means that all schools, but especially secondary schools and other forms of higher education, must contribute to their own upkeep; they must be economic communities as well as social and educational communities. . . .

'This is not a suggestion that a school farm or workshop should be attached to every school for training purposes. It is a suggestion that every school also be a farm; that the school community should consist of people who are both teachers and farmers, and pupils and farmers. Obviously, if there is a school farm, the pupils working on it should be learning the techniques and tasks of farming. But the farm would be an integral part of the school—and the welfare of the pupils would depend on its output just as the welfare of a farmer depends on the output of his land.'[3]

'But the school farms must not be, and indeed could not be, highly mechanized demonstration farms. The school farms must be created by the school community clearing their own bush, and so on—but doing it together. They must be used with no more capital assistance than is available to an ordinary, established, co-operative farm where the work can be supervised. By such means the student can learn the advantages of co-operative endeavour, even when outside capital is not available in any significant quantities.'[4]

In addition to this emphasis on the spirit of self-reliance and community life, the school should also encourage new attitudes, foster and lay down the social goals of the country. 'It has to prepare our young people to play a dynamic and constructive part in the development of a society in which all members share fairly in the good and bad fortune of the group, and in which

1. Nyerere, op. cit., pp. 61–62.
2. Nyerere, op. cit., p. 63.
3. Nyerere, op. cit., p. 64.
4. Nyerere, op. cit., p. 66.

progress is measured in terms of human well-being, not prestige buildings, cars or other such things. Whether privately or publicly owned, our education must therefore inculcate a sense of commitment to the total community, and help the pupils to accept the values appropriate to our kind of future, not those appropriate to our colonial past.'[1]

Precisely because of this role of education to foster new values and attitudes, mass education should be developed. This means not only the gradual implementation of universal primary education but also rapidly expanding adult education. This education should have three major objectives, as President Nyerere has stated:

To shake Tanzanians out of the resignation to the kind of life they have lived in the past.

To learn how to improve their lives.

To learn to understand the national policies of socialism and self-reliance.

Special emphasis is thus given to the political and economic role of adult education. 'How are the masses to be introduced to the true meaning of our independence? The new social order we are determined to establish must be explained to them for full discussion, its values must be analysed, thrashed out, selected, accepted and set as a basis for action in building our nation. This surely calls for mass education.

'Our economic plans pose another challenge. Their proper implementation depends on the knowledge, skills and commitment of the labour force of the adult population. It is only when apathy has been removed through political motivation, knowledge and skills imparted to the people that we can reasonably expect a high level of productivity.'[2]

To stress the importance given to adult education, 1970 was made the Adult Education Year. Later, the government decided to attempt to eliminate illiteracy in six priority districts by 9 December 1971 (the tenth anniversary of independence). The campaign in terms of participation was very successful. The enrolment target was achieved in four districts (Mafia, Pare, Ukerewe, Kilimanjaro), almost achieved in one district (Masasi) where enrolment in adult education was 89 per cent of the estimated number of illiterates. Surprisingly enough, the result was not nearly so high in the capital, Dar es Salaam, which was also chosen as a priority area. Here enrolment reached only 28 per cent of the target population. Encouraged, however, by the rapid progress made, TANU, the national political party, passed two very important resolutions on 25 September 1971 :

1. Adult education was to be an integral part of any work programme. That is to say that employers are duty-bound to see that their employees attend education classes to improve their efficiency and lot in life during usual working hours and without loss of earnings.

1. Nyerere, op. cit., p. 52.
2. D. Mbunda, 'Adult education in Tanzania', *Interdisciplinary symposium on life-long education*, Paris, Unesco, September 1972, p. 5.

2. Illiteracy should be wiped out completely by 1975 over the whole country. To implement this very ambitious objective, the national political party and its affiliates were used to mobilize the masses. To ensure a sufficient number of teachers, Tanzania depends on the principle that 'he who knows more teaches him who knows less' and all educated Tanzanians are socially bound to conduct adult-education classes.

It was decided that the primary school should become the centre-piece of the adult-education system, since it is the institution which is nation-wide. The primary-school teacher was therefore the main instrument, both as teacher of adult learners and as adult-education co-ordinator at the village level. The main responsibility for the adult-education programme lay thus with the Ministry of National Education, but all political organizations employers had also be involved. The Directive on Adult Education issued by the Prime Minister's Office is quite clear on that point:

1. 'All parastatal organizations and publicly owned industries, development corporations, town councils, ministries and all government offices, TANU as well as all TANU-affiliated institutions and corporations, other corporations, East African Community departments and offices, private companies, industries and wherever workers are engaged, should have special concrete educational programmes for workers' education in various fields ranging from eradication of illiteracy to on-the-job professional training.
2. 'Every institution, industry, office, etc. is expected to put aside a special amount of money to meet all essential costs for workers' education.
3. 'Workers' education should be conducted during normal working hours for not less than one hour daily.
4. 'All workers will be obliged to attend classes . . . as part of their working obligation. Any worker who will absent himself from these classes without proper reasons will be deemed to have failed to report for duty.'[1]

Briefly stated, these are the main characteristics of the Tanzanian educational policy. It covers many aspects and goes beyond the school system. It deals with expansion but also with a radical charge of the system. In presenting it and in order to be completely accurate, we have preferred to quote extensively President Julius Nyerere and official directives and guidelines.

Obviously, there are many aspects of this educational policy which are not entirely new. Some of them were already proposed during the colonial period. That the curriculum be relevant to local community life was already a concern of the colonial authorities. For instance, it was stated in the Legislative Council proceedings for the year 1928 that: 'In any vision of future development agriculture must occupy the foremost place. . . .Everything, therefore, points to agriculture as the basis of our educational system in the elementary stages.'[2]

1. Prime Minister's Office, *Directive on adult education and workers' education*, Dar es Salaam, July 1973, p. 2.
2. Quoted in J. Cameron, and W. A. Dodd, *Society, schools and progress in Tanzania*, Oxford, Pergamon Press, 1970, p. 69.

The primary-school syllabus and the middle-school syllabus published respectively in 1953 and 1955 were even more specific:

'In the teaching and education in school, it would be wrong to consider the pupils and their individual progress alone; we must consider also their responsibility in the community and the environment, so that their lessons may lead them to actions which will benefit their country. . . . It is obligatory that every primary school should have a sufficient farm. . . . The purpose of the farm is educational, that is, to show the practice of good farming and to accustom them to follow these practices.'[1]

'The middle-school course is designed to be complete in itself so that those who pass through it, whether they proceed further or not, will have received an education which will assist them to follow in a more intelligent and capable manner whatever pursuits they take up and, generally, to play a more useful part in the development of the locality to which they belong.'[2]

To a large extent all these various attempts failed because of the vigorous resistance from the people. Clearly the motivations were different, and of course the introduction of farming and other manual work was meant for African schools only. In the cities, the European and Asian schools were modelled on those in Britain. In addition, the implementation was effected in very poor conditions:

'In many colonial schools, agriculture became an apology for a subject. It was part of the drudgery of the institution. The teachers received no agricultural education and, therefore, they could not teach anything scientific. Children acquired nothing but distaste for the heavy labour of *shamba* work, and in fact it was used as a form of punishment.'[3]

The present situation is obviously quite different. The educational policy has the full support of the national political party. It is well integrated with the economic and social development policy. To follow this overall view of Tanzania's educational policy, let us now look at the development of education in recent years.

1. *Muhtasari y Mafundisho Kwa Shule za primary za Waafrika*, Dar es Salaam, Government Printer, 1953, quoted in Cameron and Dodd, op. cit., p. 109.
2. *Muhtasari y Mafundisho katika middle schools*, Dar es Salaam, Government Printer, 1955, quoted in Cameron and Dodd, op. cit., p. 109.
3. W. Rodney, *How Europe underdeveloped Africa*, Dar es Salaam, Tanzania Publishing House, 1972, p. 43.

Past development of education

The situation of education prior to independence

Formal education in Tanzania, as in other African countries, started with the activities of Christian missionaries and at the beginning of this century there were more than 600 mission schools giving basic literacy and bible classes for about 50,000 pupils. When the Germans took over the control of the country, they were not much concerned with the development of education, but, because they had to establish a junior and local civil service, mainly for the sake of economy, they were obliged to create an educational system to staff it. Thus, alongside the missionary schools, a government school system was set up. It is interesting to recall the aims of these schools. According to an official circular, they were the following: 'To enable the native to be used in government administration; to inculcate a liking of order, cleanliness, diligence and dutifulness and a sound knowledge of German customs and patriotism.'[1]

There was however one positive feature of the German schools: the medium of instruction was Swahili, which was the *lingua franca* of the country. As a result, by the beginning of the First World War, much of the official correspondence throughout the country was conducted in Swahili.

With the coming of the British, Swahili lost its prominent position; more direct links were established with the mission schools and the 'racial' pattern, i.e. separate schools for Europeans, Asians and Africans, which Tanzania had to contend with at the time of independence, gradually evolved. The essential function of education remained, however, unchanged: to facilitate and to reinforce the functioning of the colonial administration and to gain influence within the country. Thus its output was composed of clerks, tax collectors, interpreters, primary-school teachers, priests, artisans, etc.

1. Quoted in Cameron and Dodd, op. cit., p. 56.

The development of education since independence

With independence in 1961, Tanzania inherited a primary education system which in fact consisted of four separate subsystems: a subsystem for Europeans, one for Africans, one for Asians and one for other ethnic groups. It was divided into two parts, lower primary and upper primary, each of four years' duration. The four standards of lower primary were, in general, organized on a half-day basis. A single teacher was provided for standards I and II, and the same applied to standards III and IV. At the end of standard IV there was a selective examination, and about a quarter of the pupils were able to enter upper primary, standards V to VIII.

Admission to secondary education was based on another selective examination, and only one-third of the children who had completed primary education were able to go on to secondary education. This also consisted of two parts: lower secondary, of four years' duration, leading to an examination, the Cambridge School Certificate; and upper secondary, lasting two years, leading to the Higher School Certificate.

Higher education was provided by the University of East Africa, which was a joint university for the three states of Kenya, Uganda and Tanzania, with its various faculties located in Nairobi, Kampala and Dar es Salaam.

The interim plan, 1961-64

After independence the first steps were taken to integrate the four subsystems of primary education. The interim plan of 1961–64, however, gave priority to the development of secondary and higher education with the aim of training the manpower needed for economic development. Expansion of primary education was not therefore very rapid, because of financial constraints.

The first five-year plan, 1964-69

The first five-year plan was based on the same objectives as the interim plan, namely the need to develop both secondary and higher education, so as to be able gradually to replace the expatriates employed in Tanzania and to meet the increase in manpower requirements resulting from economic development. Self-sufficiency in respect of skilled personnel had to be reached by 1980. Because priority was once again given to the development of secondary and higher education, it was not possible, in view of the limited resources available, to achieve any rapid increase in the enrolments in primary education. Although quantitative expansion of primary education was thus limited, a major effort was made to improve the quality. This took the form, in particular, of a reform of the structure of primary education, of a radical change in the curriculum and of improvements in the teacher-qualification profile.

The selective examination at the end of lower primary education was retained, and the majority of the children left school at this point. To ensure, nevertheless,

that they received a certain minimum education, a reform of the syllabus was embarked upon; this aimed at achieving a better adaptation of the content of education to the diverse demands of the country, in particular by including in the curriculum more practical subjects, making the content more relevant to the needs of the rural areas. In order to make this extension of the curriculum of lower primary education possible, half-day attendance was to be gradually abolished for standards III and IV, which thus became whole-day classes. In view of this extension of the curriculum for lower primary, it was considered that upper primary education could be reduced from four to three years.

As far as the teacher-qualification profile was concerned, the first plan called for the training of grade A teachers to be increased so as to enable the current staffing formula [1] to be systematically applied in all schools, and in particular in rural schools.

Three grades of teachers existed, namely grade A, grade B and grade C. Training for each grade lasted for two years, but recruitment was at different levels: grade C after completion of primary education; grade B after two years of secondary education; grade A after completion of lower secondary education.

According to the staffing formula in force, grade C teachers taught in lower primary and grade B or grade A teachers in upper primary. There was, however, an appreciable shortage of grade A teachers, especially in the rural areas.

The first plan therefore provided for the training of grade A teachers to be increased; the training of grade C teachers, on the other hand, was slowed down. It was envisaged that over the longer term all teaching staff would be grade A. As far as grade B teachers were concerned, training of this category was discontinued and it became merely an upgrading category for grade C teachers who had undergone further in-service training, both by correspondence and during the school holidays.

The second five-year plan, 1969-74

The second five-year plan introduced a major change in the objectives of educational policy. Manpower requirements were to remain the basis of the development of secondary and higher education. Taking into account, however, the results achieved during the preceding plans and the anticipated development of manpower requirements, this policy will lead, in fact, to a certain slowing-down in the development of secondary education, and access to secondary schools will become increasingly difficult for children leaving primary schools.[1]

1. The current staffing formulae imply that upper primary should be staffed by grade A or grade B teachers.
2. Reference may be made to Figure 3 (see page 36), which shows the development of enrolments at the different educational levels and illustrates clearly this problem of the gradual decrease in admissions to secondary schools.

While the interim plan gave a fairly low priority to the development of primary education and the first five-year plan was concerned essentially with the qualitative aspects and laid down comparatively modest targets as far as any increase in enrolment was concerned, the second plan tended to emphasize the quantitative expansion of primary education. This increase in enrolment will be the result both of an increase in the intake ratio (from 43.4 per cent in 1968 to 50 per cent at the end of the plan period, to reach 95 per cent in 1989) and of the abolition of the selective examination at the end of lower primary. In other words, the second plan envisaged the gradual introduction of compulsory primary education for all children, the length of the course being seven years.

In order to deal with this expansion of primary education, the training of grade C teachers will be increased—in contrast with what had been decided during the first plan. These changes in educational policy are reflected by the changes in enrolments in the various types and levels of education.

Increases in enrolments in the various levels of education in recent years

Primary education

From 1961 to 1972, enrolments in primary schools increased from 486,500 to 1,003,600, i.e. at a rate of 6.6 per cent per annum. The global growth of enrolment does not, however, give the whole picture. As we have already noted, primary education is divided into two stages and between these two stages there is a selection examination. Thus, it is necessary to look at the trends of both the admission rate to primary education and the transition rate between lower and upper primary. This is what we have tried to illustrate in Figure 1.

The growth of new admissions was rather rapid during the interim plan and the apparent admission rate[1] went up from 40 per cent in 1961 to 43 per cent in 1964. It was lower during the first five-year plan and particularly from 1966 onwards. In fact, the growth of new admissions was merely in line with population growth and the admission rate did not change during this period. This slowing down of the growth of new admissions has resulted partly from the fact that the first five-year plan transferred to local authorities a part of the burden of primary expenditure. However, it was found very rapidly that the local authorities were unable to face this increasing expenditure and in 1969 the central government was obliged to take over almost all primary-education expenditure.[2] With the implementation of the second five-year plan the growth of new admissions increased and the apparent admission rate went up from 43.0 per cent in 1969 to 45.7 per cent in 1970, 48.9 per cent in 1971

1. The ratio of new admissions to the 7-year-old population.
2. See below, page 52.

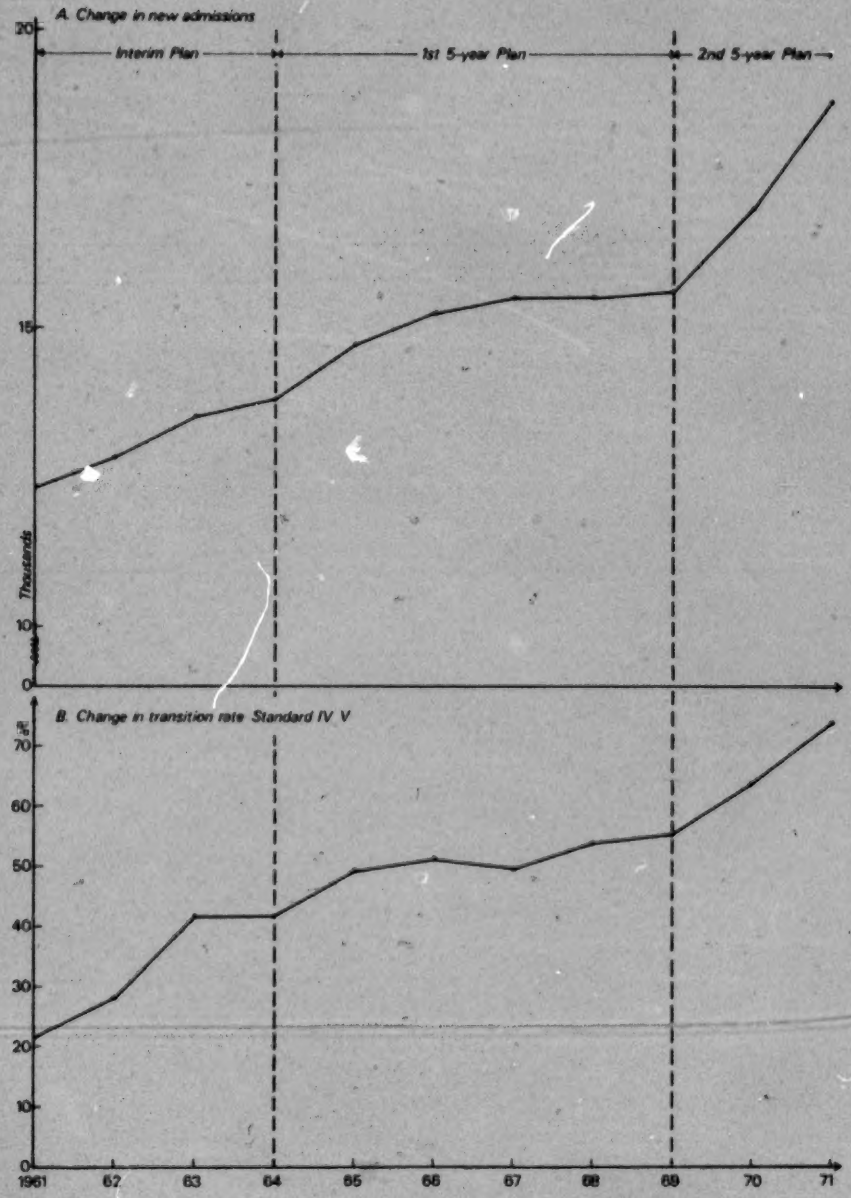

FIG. 1. Change in new admissions and in the transition ratio, standard IV/standard V.

and more than 50 per cent in 1973, which was in line with the present objective of generalization of primary education.

When Tanzania acceded to independence, the transition ratio from lower to upper primary education was very low. It was only 21.4 per cent in 1961 and there was a marked difference between the two stages of primary education. This transition ratio increased, however, very rapidly. It reached 52 per cent in 1969, and 84.2 per cent in 1972.[1] Rapid progress has thus been made towards the elimination of the selective examination: in other words, towards a complete seven-year primary-education system.

Taking into account the irregular growth of new admissions to primary education and the gradual increase of the transition ratio between lower and upper primary, the growth of enrolment was far from being the same for the various standards of primary education. As a result the shape of the school pyramid (Figure 2) has changed greatly between 1961 and 1971.[2]

The comparison of these two pyramids shows that significant progress has been achieved in the schooling of girls during the last ten years. The proportion of girls has increased from 35.0 per cent in 1961 to 39.5 per cent in 1971. It also shows the more rapid growth of upper-primary enrolment. In 1961, enrolment in upper primary was very low because the examination was very selective. As a result, in the 1961 pyramid there is a clear distinction between the two stages of primary education. In contrast the 1971 pyramid shows a much larger base because of the rapid increase in new admissions. The distinction between lower and upper primary is also much less clear because of the increase in the transition ratio.

To sum up, the following are the percentage growth rates of the first grade, the fifth grade and the last grade of primary education from 1961 to 1972: standard 1, 5.1; standard 5, 17.5; standard 7, 20.0. The growth rate of total enrolment was 6.8 per cent.

It is to be noted that the growth rate of standard 7 is much higher than the growth rate of total enrolment. This trend has, of course, some repercussions on the development of secondary education.

Teacher training

Total enrolment in teacher-training colleges increased from 1,722 in 1961 to 4,639 in 1971, but with very different increases for the different types of teacher training. The policy of improving the qualifications of teachers, introduced during the first plan, has affected the enrolments for the various categories of pupil-teachers.

1. In Tanzania automatic promotion is implemented in every school. The drop-out rate is very low, except at the points where there is a selective examination. The transition ratio at these points is therefore very important.
2. The trends of enrolments for the various standards of primary education can be found in the Appendix, Table 1.

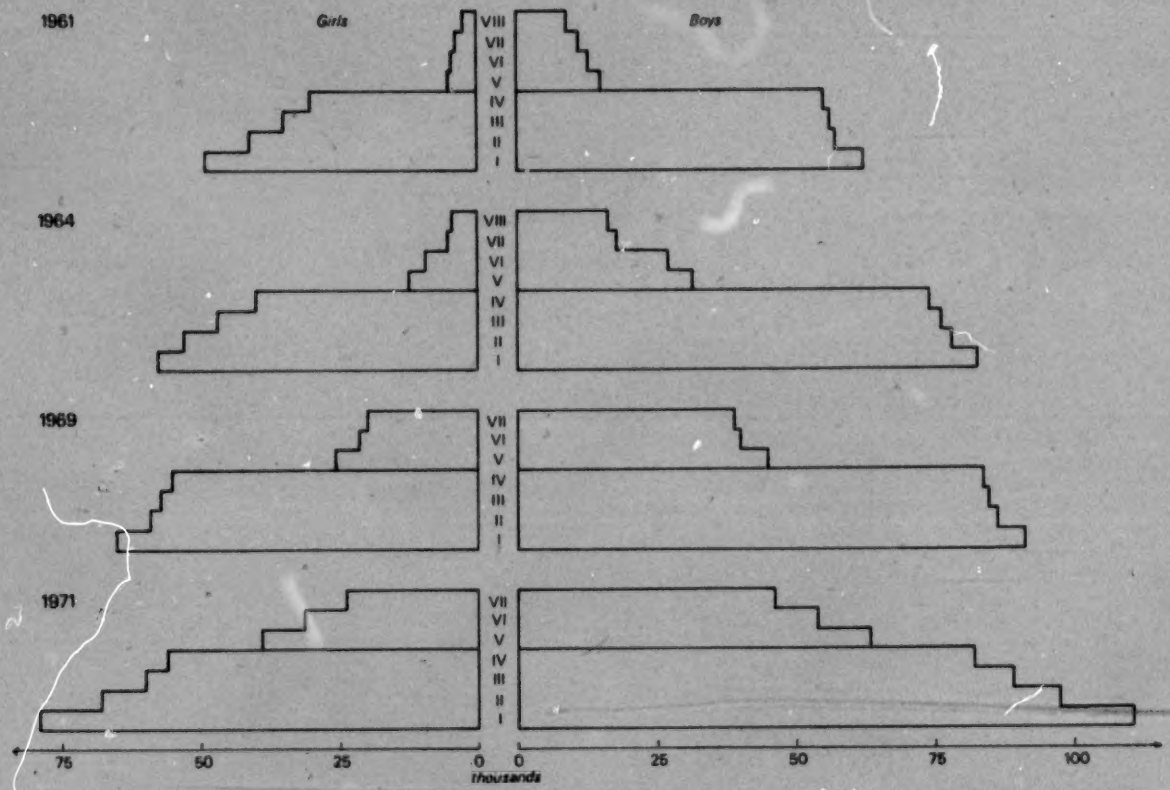

FIGURE 2. Change in the school pyramid for primary education.

In fact, two periods should be distinguished: up to 1969 on the one hand and after 1969 on the other. From 1961 to 1969 enrolment of pupil-teachers in grade A, the grade with the highest qualifications, increased fourteenfold. In contrast, the training of grade C teachers declined sharply, particularly from 1964 to 1969. As a result, the proportion of pupil-teachers in grade A, which was only 8.1 per cent in 1961, went up to 81.5 per cent in 1969. With the implementation of the second five-year plan in 1969, the situation changed greatly. Emphasis was given to the rapid development of primary education, and the need for additional teachers increased drastically. To satisfy this new need, the training of grade C teachers increased quickly while that of grade A teachers tended to decrease (Table 2).

TABLE 2. Trend of enrolments in the different categories of teacher training

Category	1961	1964	1966	1969	1970	1971	1972
Grade A							
First year	92	239	706	1 189	761	676	850
Second year	47	182	476	814	1 172	831	809
TOTAL	139	421	1 182	2 003	1 933	1 507	1 659
Grade B							
First year	129	—	—	—	—	—	—
Second year	193	50	—	—	—	—	—
TOTAL	322	50	—	—	—	—	—
Grade C							
First year	780	891	643	312	1 465[1]	1 669[1]	2 081[1]
Second year	481	705	619	144	357	1 032	899
TOTAL	1 261	1 596	1 262	456	1 822	2 701	2 980
All grades	1 722	2 067	2 444	2 459	3 755	4 208	4 639
Percentage of grade A	8.1	20.4	50.0	81.5	51.5	35.8	35.8

1. Including Grade C (national service) who receive only one year of training after their national service.

SOURCE Ministry of National Education, *Educational statistics: Ten years of independence, 1961–71*, Dar es Salaam 1971 and *Educational statistics handbook, 1969–72*, Dar es Salaam, 1973.

Secondary and technical education

As already pointed out, secondary education is divided into two cycles: lower secondary and upper secondary. Lower secondary is devoted to general education. Since 1971, however, the policy of 'diversification' or 'vocationalization' has been systematically introduced into all secondary schools. Each school should have two 'biases' in the various fields: in agriculture, industry, commerce, crafts and home economics. It is hoped that with this change in the

curriculum, and with the emphasis on more practical subjects, the secondary-school leaver will be able to find a useful occupation as a self-employed person or as a productive member of a *ujamaa* institution.

The transition ratio between lower and upper secondary education is comparatively low. It is true that upper secondary is essentially a preparation stage for admission to higher education. Instead of going on to upper secondary education, those who have completed lower secondary school can also take up teacher training (grade A teachers) or further education (at technical colleges).

Before analysing the growth of enrolments in lower and upper secondary education, it would be interesting to look at the trend of the transition ratio from primary education to lower secondary education and that from lower to upper secondary education.

TRANSITION RATIO FROM PRIMARY TO LOWER SECONDARY EDUCATION

Table 3 relates enrolments in the last grade of primary education to enrolments in the first grade of lower secondary (public and private) and to enrolments in the first grade of teacher training (grade C teachers). It also gives the transition ratio from primary to public secondary education, from primary to private secondary education and from primary education to teacher training.

TABLE 3. Transition ratio from primary to secondary education

Year	Standard VII	Form I		First-year teacher training (grade C)	Transition ratio (%)			
		Public	Private		Column (2) to column (1)	Column (3) to column (1)	Column (4) to column (1)	Total
	(1)	(2)	(3)	(4)				
1961	11 732							
1962	13 730	4 810	—	753	40.1	—	6.4	46.5
1963	17 042	4 972	—	700	36.2	—	5.1	41.3
1964	20 348	5 302	—	891	31.1	—	5.2	36.3
1965	33 892	5 942	458	625	29.2	2.3	3.1	34.6
1966	46 816	6 377	2 329	643	18.8	6.9	1.9	27.6
1967	51 460	6 635	2 591	359	14.2	5.5	0.8	20.5
1968	57 381	6 989	2 610	150	13.6	5.1	0.3	18.9
1969	60 790	7 149	2 511	312	12.5	4.4	0.5	17.4
1970	65 625	6 372	3 021	1 465	12.1	5.0	2.4	19.5
1971	70 502	7 570	3 254	1 679	11.5	4.9	2.6	19.0
1972		7 747	3 716	2 081	11.0	5.3	3.0	19.3

SOURCE Ministry of National Education, *Educational statistics . . . 1961–71*, op. cit., and *Educational statistics handbook, 1969–72*, op. cit.

As we have previously noted, enrolment in the last grade of primary education has increased at a much higher rate than total primary enrolment.[1] Enrol-

1. Because of the gradual increase in the transition ratio from standard IV to standard V.

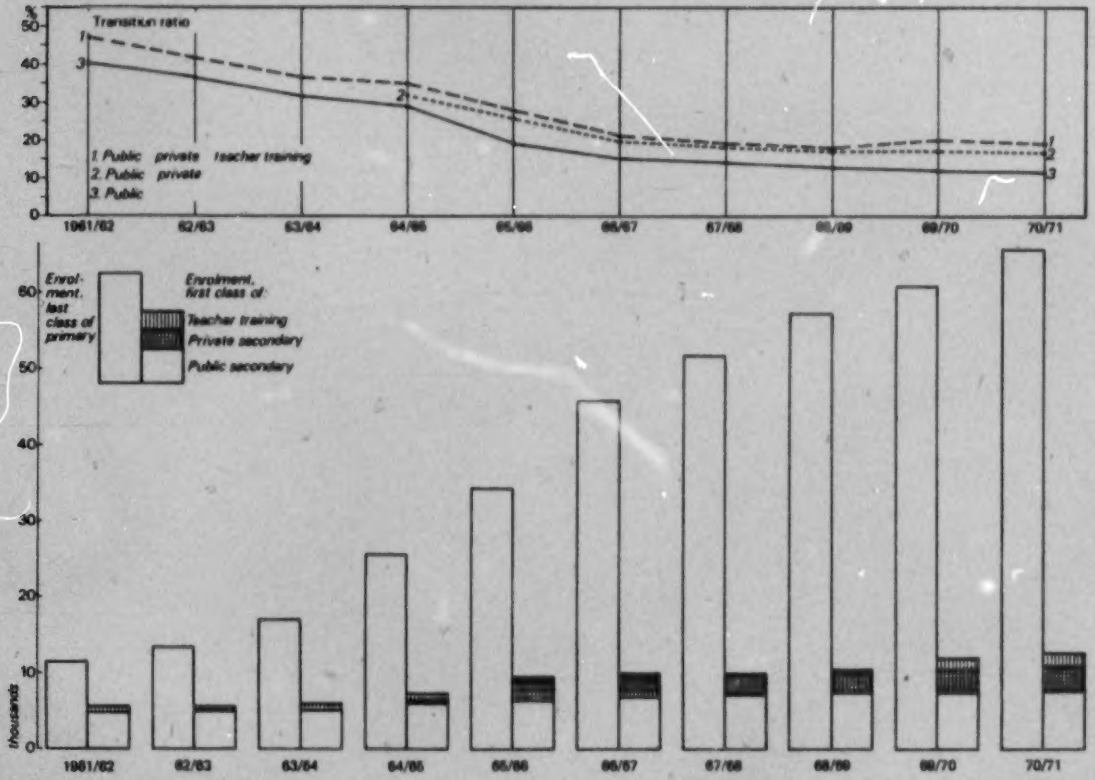

FIGURE 3. Change in the transition ratio from primary to secondary education and change in the enrolments in the different types of secondary education.

ment in the first grade of public secondary education has also increased, but not so rapidly, for the policy of the Tanzania Government is to provide secondary and higher education only to the extent justified by the manpower requirements of the economy. As a result, the transition ratio from primary to public secondary has tended to decrease in recent years. It went down from 40 per cent in 1962 to 11.0 per cent in 1972. Partly because of this more severe selection to public secondary education, enrolment in private (non-aided) secondary education has tended to increase, particularly since 1965. At present, enrolment in form 1 of private schools has reached half that of public schools. In addition to public and private secondary education, primary-school leavers can also go into teacher training (grade C teacher training) (Figure 3). Here also the transition ratio has tended to decrease.

On the whole, even if we take into account total enrolments in public secondary, private secondary and teacher training, the transition ratio has decreased sharply, from 46.5 per cent in 1962 to 19.3 per cent in 1972. This decline in the transition ratio from primary to secondary level means in fact that the selection process which occurred at the end of lower primary (in 1961 the transition ratio from standard IV to standard V was only 21.5 per cent) has been moved to the end of upper primary. One can nevertheless wonder whether it is possible in the long term to expand primary education and limit the access to secondary education on the basis of manpower requirements. This policy will lead unavoidably to a further decline in the transition ratio. It is precisely to facilitate the implementation of this policy that strong emphasis has been placed on self-reliance and change in the curriculum of primary education. It is expected, by this change in the curriculum, that the great majority of primary-school leavers will work in rural areas and particularly in *ujamaa* villages.

TRANSITION RATIO FROM LOWER TO UPPER SECONDARY EDUCATION

In the same way as before we will examine successively the transition ratio from lower secondary to public upper secondary, to private upper secondary and to the first year of teacher training (grade A teachers) (Table 4).

The transition ratio from lower to public upper secondary education has fluctuated somewhat during the last decade. In recent years, it has tended to decrease. Enrolment in the first year of grade A teacher-training colleges has also fluctuated very much. As we have seen, it depends closely on government policy concerning the qualification profile of the teaching force in primary education. During the first five-year plan and more particularly from 1966 to 1969, enrolment in the first year of grade A teacher training was almost as high as enrolment in form V but with the second five-year plan emphasis was given to the training of grade C teachers, and enrolment in grade A teacher-training colleges decreased. Private education at the upper secondary level, although it has expanded in recent years, is still very limited. If we examine the system as a whole, it may be said that the transition ratio from lower to

TABLE 4. Transition ratio from lower to upper secondary education

Year	Form IV	Form V		First-year teacher training (grade A)	Transition ratio (%)			
		Public	Private		Column (2) to column (1)	Column (3) to column (1)	Column (4) to column (1)	Total
	(1)	(2)	(3)	(4)				
1961	1 603							
1962	1 950	286	—	85	17.8	—	5.4	23.2
1963	2 937	497	—	183	25.5	—	9.4	34.9
1964	3 630	616	—	239	21.0	—	8.1	29.1
1965	4 554	780	—	493	21.5	—	13.6	35.1
1966	5 045	826	2	706	18.2	—	15.5	33.7
1967	5 460	895	20	818	17.7	0.4	16.2	34.3
1968	6 418	1 214	18	1 086	22.2	0.3	19.9	42.4
1969	7 813	1 410	49	1 189	22.0	0.8	18.5	41.3
1970	8 727	1 506	149	761	19.3	1.9	9.7	30.9
1971		1 608	113	676	18.4	1.3	7.7	27.4

SOURCE Ministry of National Education, *Educational statistics ... 1961–71*, op. cit., and *Educational statistics handbook, 1969–72*, op. cit.

TABLE 5. Distribution of form IV leavers in 1972

Destination of leavers	Planned requirement	Actual distribution	
		Number	Percentage
Training institutions			
Entry form V	1 776	1 801	21.1
Teacher education (grade A)	800	823	9.7
Dar es Salaam Technical College	300	275	3.2
Tabora Secretarial College	540	172	2.0
Civil Service Training Centre	360	106	1.2
Dar es Salaam School of Accounting	130	148	1.8
Others	110	86	1.0
SUBTOTAL	4 016	3 411	40.0
Pre-service courses			
Government	2 332	1 830	21.4
East African Corporation	344	133	1.6
Parastatals	153	94	1.1
SUBTOTAL	2 829	2 057	24.1
Direct employment	2 845	3 062	35.9
TOTAL	9 690	8 530	100.0

SOURCE Ministry of National Education, unpublished document.

upper secondary (including grade A teacher training) has tended to decrease in recent years, going down from 42.4 per cent in 1968 to 27.4 per cent in 1971. This transition ratio does not give, however, a complete picture of the situation of form IV school leavers. In addition to upper secondary and grade A teacher training, there are other training institutions recruiting form IV leaves (see Table 5). Special pre-service training programmes are also organized by the government or by the parastatal enterprises. Finally, some form IV leavers enter the labour force directly. The present policy of providing at least two vocational 'biases' in each lower secondary school is aimed at facilitating direct access to the labour force. In 1972, for instance, 40 per cent of the form IV leavers continued their education in some regular training institutions. These included not only upper secondary and grade A teacher training, but also the Dar es Salaam Technical College, the Tabora Secretarial College, the Civil Service Training Centre, the Dar es Salaam School of Accounting, etc. The proportion going to pre-service courses (government, East African Corporation) was 24.1 per cent and the rest (i.e. 35.9 per cent), with the assistance of the Labour Division Appointment Bureau, was to find direct employment in the parastatal or private enterprises.

It is interesting to compare the planned requirements (as given by the manpower planning division) and the actual selection made by the Ministry of National Education. In 1972, the planned requirement of form IV leavers was 9,690, while the real number was 8,530. Thus there was a small shortage; yet the number of form IV leavers who had to find direct employment was higher than was planned. This surprising situation was due to the fact that some regular training institutions did not expand as quickly as planned (Tabora Secretarial College, Civil Service Training Centre). In addition, admissions to the pre-service courses organized by the government and by the parastatal enterprises were lower than expected.

TRANSITION FROM FORM VI TO UNIVERSITY

In 1972, out of 1,533 form VI leavers, 896 were selected for admission to the university. The average selection rate was thus 58.4 per cent. In fact, the situation was very different according to the various upper secondary schools and the range was from 82.2 per cent for Kibaha to 8.3 per cent in Mzizima (Table 6). From the point of view of access to university, it can be said therefore that there is great inequality among the upper secondary schools. However, access to university is not the only possible way for the form VI leavers to continue their training (see Table 7). They can undertake pre-service courses at various training institutions such as teacher-training colleges (educational officer grade III), Institute of Development Management, agricultural institutes, etc. In 1972 the proportion that followed these pre-service courses was 32.1 per cent, and only 9.5 per cent were allocated to direct employment by the government, the East African Community and the parastatal enterprises. Even in this case, form VI leavers may have received some kind of pre-service training.

TABLE 6. Selection rate for admission to university in the twenty-eight upper secondary schools of Tanzania

More than 60 per cent		From 45 to 60 per cent		Less than 45 per cent	
Name of school	Selection rate	Name of school	Selection rate	Name of school	Selection rate
Kibaha	82.2	Minaki	59.5	Musoma	43.4
Tosamaganga	77.3	Mazengo	58.9	Shinyanga	40.8
Ilboru	77.2	Songea	58.3	Jangwani	40.4
Dar es Salaam Technical College	75.8	Tanga	57.4	Milambo	38.6
Mzumbe	70.8	Tabora Boys	54.9	Itaga	36.3
Pugu	70.5	Tabora Girls	53.0	Kilakala	36.3
Azania	67.5	Moshi	52.1	Rugambwa	33.3
Mkwawa	62.0	Ndanda	52.0	Mzizima	8.3
Tambaza	61.9	Usagara	50.0		
Korogwe	61.2	Ihungo	47.8		

TABLE 7. Distribution of form VI leavers in 1972

Destination of leavers	Planned requirement	Actual distribution	
		Number	Percentage
Pre-service courses			
Teacher education (educational officer grade III)	160	173	11.3
Institute of Development Management	290	110	7.2
Land Institute	90	72	4.7
Military training	100	32	2.1
Civil aviation courses	100	17	1.1
Agriculture	50	50	3.3
Other	45	37	2.4
SUBTOTAL	835	491	32.1
Direct employment			
Government	274	85	5.5
East African Community	56	20	1.3
Parastatals	137	41	2.7
SUBTOTAL	467	146	9.5
Admission to university	—	896	58.4
TOTAL	—	1 533	100.0

SOURCE Ministry of National Education, unpublished document.

If the actual distribution of form VI leavers is compared to the planned requirement, it can be seen that there was a sizable shortage. This was quite obvious in the case of direct employment. In the case of admission to pre-

service courses the situation varied according to the training institutions. This might be explained both by the actual shortage of form VI leavers and by the fact that some training institutions did not develop as quickly as planned.

GROWTH OF ENROLMENT IN SECONDARY EDUCATION

As we have previously noted, the decrease in the transition ratio from primary to secondary education was due essentially to the very rapid increase in enrolment in standard VIII, the last grade of primary school. Indeed, despite the gradual decrease of this transition ratio, enrolment in public secondary education has increased steadily during the last decade, going up from 11,832 in 1961 to 32,603 in 1971, i.e. at an annual growth rate of 10.7 per cent. If enrolment in private education is added, the growth rate is even higher (see Appendix, Table 5). This rapid growth can be seen in Figure 4, which shows the change in the secondary-school pyramid.

Higher education

Until 1971, higher education was provided essentially by the University of East Africa (Table 8), with faculties in Nairobi, Dar es Salaam and Kampala. Since then the university has been divided into three national universities.

TABLE 8. Trends of enrolment of Tanzanian students at the University of East Africa

	Degree course			Diploma course			Total		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
1961/62	167	11	178	14	2	16	181	13	194
1962/63	158	18	176	24	6	30	182	24	206
1963/64	237	25	262	35	8	43	272	33	305
1964/65	283	54	337	80	10	90	363	64	427
1965/66	489	81	570	51	5	56	540	86	626
1966/67	715	76	791	7	3	10	722	79	801
1967/68	1 052	124	1 176	11	14	25	1063	138	1 201
1968/69	1 316	141	1 457	26	15	41	1 342	156	1 498
1969/70	1 515	254	1 769	190	14	204	1 705	268	1 973
1970/71	1 508	259	1 767	224	37	261	1 732	296	2 028

SOURCE Ministry of National Education, *Educational statistics ... 1961–71*, op. cit., and *Educational statistics handbook, 1969–72*, op. cit.

As in secondary education, enrolments in higher education have increased very rapidly. The number of Tanzanian students at the University of East Africa increased by a factor of more than ten over a period of ten years, namely from 194 in 1961/62 to 2,051 in 1971/72. The number of students sent to foreign universities, on the other hand, has also increased, but to a lesser extent.

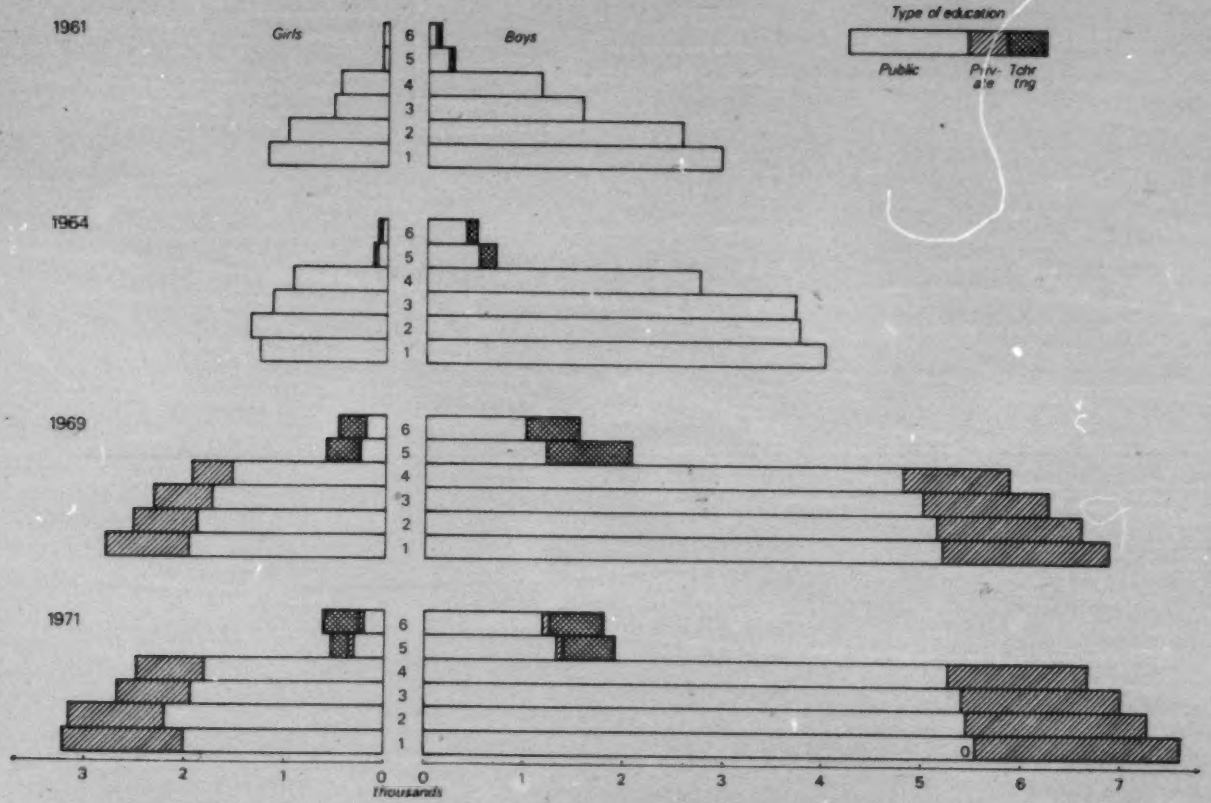

FIGURE 4. Change in the pyramid of secondary general and technical education.

Non-formal and adult education

Alongside the development of the school system, great emphasis has been given, in recent years, to a wide variety of training programmes organized either by the government or by the parastatal enterprises. These various training programmes can be divided into two main categories. In the first are the programmes which are meant to build upon and develop the benefits of schooling through activities geared to the practical application of acquired education to day-to-day problems and in the second are those which try to compensate for the lack of formal education.

In addition to the ambitious objective of eradicating illiteracy by 1975 by means of adult-education classes organized throughout the whole country, non-formal education includes various institutions and covers the following main sectors: vocational training for youth and adults; rural development training; health education; training for leadership and management.

VOCATIONAL TRAINING FOR YOUTH AND ADULTS

In-service training obviously plays a very important part and it may be said that the major responsibility for training industrial workers is held by the employing establishments themselves, the role of the government being that of assisting them in carrying out their responsibility. More specifically, two institutions are devoting their efforts to vocational training: the National Industrial Training Centre and the National Institute of Productivity.

The National Industrial Training Centre was established in 1968 with the assistance of the United Nations Development Programme and the International Labour Organisation. It works in close co-operation with employers and conducts both training and testing programmes, which have met with considerable success. The subjects taught include electricity, building, auto-mechanics, fitting, welding and plumbing. The programme in fact has three parts:

1. A two-year course with one year spent at the centre for theoretical as well as practical training and one year devoted to in-plant training with an employer.
2. Evening classes for employed craftsmen run for periods of six months in Dar es Salaam and in twenty up-country towns.
3. A testing programme which operates twice a year in six different trades. With the help of mobile units, trade testing is carried out in rural localities.

The National Institute of Productivity, sponsored by the Ministry of Communications, Transport and Labour, also works closely with industrial firms and parastatals in organizing short training courses for middle managers and supervisory staff in various subjects such as general management, industrial engineering, marketing and distribution, management accounting, personnel management, supervisory training and workers' education.

RURAL DEVELOPMENT

With the emphasis given to the development of rural areas and to the creation of new *ujamaa* villages, rural development training has obviously received first priority. It is conducted in various institutions: agricultural study groups, rural training centres, co-operative education centres and agriculture training institutes.

The agricultural study groups are directly aimed at villages. They tend to consolidate what has been done by the traditional extension operation and the introduction of agriculture into the formal school system. They are led by volunteer agriculture teachers, who may be outstanding farmers, or by field agriculture officers. The formation of study groups will be facilitated by the creation of new *ujamaa* villages. It will be supported by an intensified radio and publications programme under the auspices of the National Institute of Farmers' Education.

The rural training centres (RTCs) are run by the Ministry of Regional Administration and Rural Development. Their originality lies in the fact that those who attend them are nominated by their villages and upon completion of the course are expected to return to their villages to provide service and leadership to their fellow villages. They are supposed to respond to local priorities in such fields as simple handicrafts (village-house construction, construction of wells, road-building) or home economics and to offer vocational, agricultural and leadership training for rural producers. The length of the course depends upon the subjects taught. It may last from one to three months. Most RTCs have boarding facilities. There are at present more than forty RTCs and although the recurrent cost of the RTC is rather high, it is the intention of the government to have one such centre for each of the country's sixty-four districts.

Co-operative education is provided mainly at the co-operative college in Moshi, which in addition to its normal training programme also includes correspondence courses. The programme is primarily geared to members of co-operative societies.

The agriculture training institutes, organized by the Ministry of Agriculture, aim at training agricultural extension agents. They recruit their trainees after form IV and offer certificate-level two-year courses in agriculture, forestry and veterinary science. The graduates of these courses may qualify for a diploma course involving one additional year of training and some field experience. The present number of extension agents falls far short of needs. On average there is one agent for every 1,600 farm units while the goal is to have one agent for every 500 farmers. This shortage is made even more acute with the current policy of allocating one extension agent to every existing *ujamaa* village.

HEALTH EDUCATION

Malnutrition and infectious diseases account for the largest number of illnesses

in Tanzania. Preventive medicine is consequently of vital importance to the country. It includes both health education and environmental control. Health education, the purpose of which is to teach people how to improve their own or their family's health by changing some of their personal habits, is systematically provided to all patients or their parents at the hospitals, rural health centres and dispensaries. Together with health education, a significant effort has been made in the field of environmental control by upgrading sanitary facilities and eliminating such hazards as inadequate water supply and mosquito infestation, which promote infectious and parasitic diseases.

It is clear that the development of both health education and environmental control require efforts going far beyond the responsibility of the Ministry of Health. Primary schools, adult education institutions and RTCs should be involved in this effort towards giving greater awareness of health and environmental hazards among the rural population. While some progress is being made, the impact is still limited because of the lack of co-ordination between the Ministry of Health and other ministries. Moreover, the number of doctors (a large proportion are expatriates) and of paramedical personnel is far too small compared with need.

TRAINING FOR LEADERSHIP AND MANAGEMENT

The lack of managerial skills is certainly one of the main obstacles to the country's development. This is so for most developing countries, but even more so for Tanzania, where the state has taken control over the largest corporations in the various industries and where current policy is geared towards the taking of greater initiative at the regional level. The management bottleneck is felt in every critical sector of the economy: the parastatal enterprises, the major ministries, the regional and district government bodies. About one-fourth of administrative, management and executive positions are still held by expatriates. In addition there are many vacant posts. The development of management and training (which includes various activities, such as pre-employment exposure to concepts, principles and techniques, in-service training in the practice of management, periodic retraining and upgrading of skills) is thus of key importance.

The institutions for management training are still in the early stages of development. The most important one is the Institute of Development Management located at Morogoro. It was established in 1970 by merging two existing institutions, the Institute of Public Administration of the University of Dar es Salaam, and the Local Government Training Centre. The major functions of the institute are: (a) to conduct training programmes in the field of management and administration, accounting, secretaryship, local government and rural development; (b) to provide consultancy services; (c) to undertake research into operational and organizational problems; and (d), to sponsor conferences and seminars and produce publications in the field of management.

It is a residential training institution which provides courses leading to professional qualifications. The length of these courses varies from one to four years, but there are also shorter courses and seminars for periods ranging from one to three months.

ADULT EDUCATION

In the previous section, we stressed the importance given to adult education in the educational policy of Tanzania. The first important step towards the development of adult education was taken as early as May 1965, when the Government of Tanzania submitted a request to Unesco for assistance in an adult-literacy pilot project. Authorization to begin this operation was given early in 1968, and the whole year of 1968 may be considered as a preparation phase. By early 1969 the project had started operating on a substantial scale but in a situation that was unsatisfactory in many respects: the standards of the teachers were low, teaching materials were inadequate and the definition of the classes was weak. The situation improved considerably in 1970, which was officially declared Adult Education Year. New classes were opened and six differentiated training programmes prepared (each including a first- and second-year primer) in the following fields: cotton-growing, rice-growing, banana-growing, home economics, fishing and cattle-rearing.

In its initial stage the project was to operate in four pilot areas and one division was selected in each of the four districts covered by its operation: Busega division in Mwanza district, Ihagiro division in Bukoba district, Nyegesi division in Shinyanga district and Nansimo division in Musoma district. The transfer of the project to the Ministry of National Education opened new possibilities by making the services of primary-school teachers as literacy instructors available to the project. At the same time it extended the scope of the literacy campaign which is to cover the whole country.

Although the primary school has become the centre-piece of the adult education system, and the main responsibility for organizing it lies with the Ministry of National Education, many institutions contribute to the national adult-education effort. TANU, the national political party, plays an important part in mobilizing the villagers and encouraging enrolment and regular attendance. Other ministries (rural development, health, agriculture) co-operate also by supplying extension officers to help in the teaching of special skills. In reality all government bodies, parastatal enterprises and private companies are engaged, in one way or another, in the adult-education programme, as can be seen from the recent directive on adult education and workers' education issued by the Prime Minister's Office.[1]

The administrative network for adult education includes the National Advisory Committee, with representatives from various institutions at the national level, the Regional Adult Education Committee at the regional level, the Dis-

1. See above, pages 24–25.

trict Education Officer for Adult Education at the district level, the Adult Education Co-ordinator at the division level and, finally, specially designated primary headmasters responsible for adult education at the ward (village) level.

The teaching staff involved in adult education can be divided into three main categories:

1. *Primary-school teachers.* Most primary-school teachers are expected to spend six hours a week with adult classes, but at the same time their teaching load with children is reduced by two hours.
2. *Extension service offivers, education civil servants and employers.* Parastatal and private enterprises may also conduct adult classes during working hours as an integral part of their duties.
3. *Volunteer teachers recruited among primary-school leavers, working in family farming and paid thirty shillings a month.* Each volunteer teacher is in charge of one adult class and has therefore to teach six hours a week.

To provide a follow-up for the new literates, the Institute of Adult Education has worked on the production of simple story books in Swahili. Swahili newspapers are also requested to devote, in each issue, one page to new literates. The text, written in simple words and published in large print, is prepared by the Assistant Commissioner (Adult Education) of the Ministry of National Education.

Since Swahili is commonly spoken by a large majority of the population, and its writing is merely a phonetical transcription using roman characters, a literacy campaign in Tanzania does not encounter the same problems as in some other African countries. At any rate, the enrolment, as can be seen from the figures published by the Directorate of Adult Education, is impressive. Enrolment in adult education increased from 360,000 in December 1970 to 1.1 million in December 1971 and to 2.7 million in December 1972. This last figure must be compared with enrolment in primary education which, in 1972, was only around 1 million. Enrolment in adult education was thus 2.7 times that of primary education. The same can be said about the number of teachers working in adult-education classes. Their numbers increased from 14,600 in December 1970 to 68,500 in December 1972 (3.1 times the teaching staff of primary education).

Since the number of adult illiterates was estimated at nearly 5.2 million, enrolment in adult-education classes has reached 52 per cent of the total number of illiterates at the end of 1972.[1] In spite of a large disparity between the various regions (18.8 per cent in Dodoma as against 90.6 per cent in Mwanza) one may say, if these figures are reliable, that Tanzania is making a very big effort towards the goal of eradicating illiteracy by 1975. [2]

1. For more details see Table 6 in the Appendix.
2. It is to be noted that the target date for eradicating illiteracy among adults is not the same as the target date for universal seven-year primary education. According to present plans the target for universal primary education is set for 1989.

Trends of educational expenditure and sources of finance

Private education as such, i.e. education financed mainly from private sources, has developed to only a limited extent in Tanzania. At the primary-school level, enrolment in private non-aided schools is only 3.2 per cent of total primary enrolment. At the secondary-school level, this proportion is greater and tends to increase, going up from 4.7 per cent in 1965 to 24.5 per cent in 1972. It is not possible, however, to collect precise data about expenditure on non-aided education.

Trends of educational expenditures

RECURRENT EXPENDITURE

Over the period 1962 to 1971, public recurrent educational expenditure increased from 129 million to 374 million shillings, i.e. at a rate of 12.6 per cent per annum. This rate of increase is much greater than that of the monetary GDP, or that of total public recurrent expenditure. This rapid growth is due both to the development of the formal school system and to the creation of new training programmes. The distribution of expenditure according to type and level of education was as shown in Table 9.

The increase in expenditure at the various levels of education has followed a course more or less parallel to the increase in enrolment previously discussed. The share of primary education and teacher training, despite a tendency to decrease in recent years, is still sizable (51 per cent total expenditure in 1971/72). The growth of secondary and technical education has been rather

TABLE 9. Trend of public reccurrent expenditure by level of education 1962–71 (expenditures in million shillings)

Sector	1962/63	Percentage	1966/67	Percentage
Administration	19.1	*14.8*	11.0	*5.9*
Primary education	68.3	*52.8*	103.3	*55.2*
Teacher training	6.2	*4.8*	11.6	*6.2*
Secondary and technical	28.1	*21.6*	45.6	*24.4*
Higher education	7.7	*6.0*	15.8	*8.3*
Adult education	—	—	—	—
Rural training	—	—	—	—
Industrial training	—	—	—	—
Health training	—	—	—	—
Civil Service training	—	—	—	—
Institute of Development Management	—	—	—	—
TOTAL	129.4	*100.0*	187.2	*100.0*

moderate since 1968/69. This is in line with the policy to provide secondary and technical education only to the extent justified by the estimated manpower requirements. In contrast, higher-education expenditure continues to increase at a very high rate. The most interesting feature in recent years has been, however, the rapid development of non-formal education. This is especially true for adult education and rural education, the share of which rose from 2.4 per cent in 1969/70 to 11.4 per cent in 1971/72. This trend will certainly continue.

CAPITAL EXPENDITURE

Although local authorities contribute to the financing of part of the capital expenditure for primary education, their participation is not known exactly since it often takes the form of non-monetary contributions through community development schemes. In fact, it is central government that is mainly responsible for the financing of capital expenditure. Capital expenditure, as reported in the final accounts of the Ministry of National Education and of the Ministry of Public Works, on behalf of National Education, has developed as shown in Table 10.

Investment expenditure on education has shown marked fluctuations over the 1965–72 period. Its proportion of total government investment expenditure has varied over the years. This marked variation is due to the gradual implementation of various projects that are more or less independent of one another. The level of expenditure in any given year is thus without any great significance.

1968/69	Percentage	1969/70	Percentage	1970/71	Percentage	1971/72	Percentage
13.1	*6.0*	16.5	*6.4*	18.8	*6.0*	19.7	*5.3*
108.9	*49.7*	124.3	*48.6*	140.0	*44.7*	171.0	*45.7*
12.6	*5.8*	15.0	*5.9*	16.9	*5.4*	19.5	*5.2*
54.1	*24.7*	56.2	*22.0*	58.1	*18.5*	65.0	*17.3*
30.4	*13.8*	31.5	*12.3*	40.7	*13.0*	45.8	*12.0*
—	—	2.5	*1.0*	7.8	*2.5*	11.0	*2.9*
—	—	3.6	*1.4*	22.0	*7.0*	31.8	*8.5*
—	—	0.8	*0.3*	1.4	*0.4*	1.4	*0.4*
—	—	2.0	*0.8*	3.2	*1.0*	4.8	*1.3*
—	—	2.4	*0.9*	2.6	*0.8*	2.3	*0.6*
—	—	0.9	*0.4*	2.2	*0.7*	2.1	*0.6*
219.1	*100.0*	255.1	*100.0*	313.1	*100.0*	374.4	*100.0*

TABLE 10. Trends of capital expenditure by level of education, 1965–72 (in thousand shillings)

Sector	1965/66	1967/68	1968/69	1969/70	1970/71	1971/72
Administration	772	92	36	2 389	1 716	384
Primary education	4 737	1 884	2 012	14 674	20 123	9 300
Secondary education	2 669	3 843	5 463	3 021	10 338	19 271
Teacher training	2 770	7 653	4 893	4 597	7 301	3 484
Higher education	15 900	10 854	1 000	3 425	5 138	2 453
Adult education	—	—	—	452	2 028	—
Other	—	—	—	45	136	—
TOTAL	26 848	24 326	13 404	28 603	46 830	34 892

The pattern of capital expenditure, by level of education, is quite different from that of recurrent expenditure, for capital expenditure depends on the rate of growth of the different types of education and, as we have noted, the emphasis placed on the various levels of education was quite different in the three successive educational plans.

Investment expenditure on primary education was comparatively low up to the end of the first five-year plan, which shows the somewhat slow rate at which it developed. With the second five-year plan, investment at that level increased significantly as a result of the new priority given to the quantitative expansion of primary education.

Expenditure on secondary education was at a high level before 1965. It then decreased and remained unchanged at a comparatively low level. This static situation is partly the consequence of delays in securing a second loan from the World Bank. In 1970 and 1971, capital expenditure on secondary education rose sharply.

Finally, expenditure on higher education has been at a very high level over the period 1963–68, during which the main faculties of the University of Dar es Salaam were set up (law, arts, science, medicine and agriculture). Since the end of 1968, expenditure has decreased greatly; it will no doubt increase once again in the course of the present plan, when the Faculty of Engineering is to be created.

Trends in the financing of educational expenditure

The four main sources of finance for educational expenditure in Tanzania are the state, the local authorities, private sources (school fees and the resources owned by the private schools themselves) and foreign aid. The financing system of primary education, however, is somewhat different from that for the other levels of education, and will therefore be considered separately.

FINANCING OF PRIMARY EDUCATION

Primary schools may be divided into four main groups: (a) government schools; (b) schools administered by local authorities; (c) private schools subsidized by the government or by local authorities; (d) non-aided private schools.

The number of non-aided private schools is very small. Government financing takes three different forms: direct financing, in the case of the government schools; direct subsidies to certain private schools; a lump-sum subsidy to local authorities.

The local authorities, in addition to the subsidies they receive from the state, also devote a part of their own resources to the financing of primary education. This financing is effected either directly, through the intermediary of the schools administered by the local authorities, or in the form of a subsidy to private aided schools.

Primary schools used to charge fees which were over and above the resources just described. These fees have, however, been abolished recently in order to facilitate the rapid expansion of primary education. The respective share of central government and of the local authorities in the financing of primary education is shown in Table 11.

TABLE 11. Sources of finance of primary education expenditure (in thousand shillings)

Year	Central government		Local authorities		Total
	Amount	Percentage	Amount	Percentage	
1962/63	45 772	67.0	22 500	33.0	68 322
1963/64	45 582	64.4	25 260	35.6	70 842
1964/65	53 875	60.9	34 524	39.1	88 419
1965/66	55 777	58.9	38 999	41.1	95 775
1966/67	61 579	59.6	41 701	40.4	103 280
1967/68	64 183	61.0	41 060	39.0	105 243
1968/69	90 435	83.1	18 433	16.9	108 868
1969/70	124 271	100.0	—	—	124 271
1970/71	139 975	100.0	—	—	139 975
1971/72	170 982	100.0	—	—	170 982

SOURCE United Republic of Tanzania, *Appropriation accounts.*

When the first five-year plan (1964/69) was being prepared, it was decided to increase the contribution of the local authorities to the financing of primary education because of the gap between planned educational expenditure and the resources that the government was able to allocate to it. Following on this decision, the expenditure of the local authorities increased from 23 million shillings in 1962 to 39 million in 1965, i.e. an increase of 70 per cent in three years. Their share in the financing of primary education thus increased from 33 per cent to 41 per cent.

Many local authorities, however, quickly found themselves unable to deal with such a rapid increase in expenditure and their budget deficits increased. In certain cases, salaries were paid only after long delays. It is for this reason that central government increased its subsidies and its share went up from 59 per cent in 1965 to 83 per cent in 1968, while that of local authorities decreased. A new step was taken at the end of 1968. In view of the difficulties encountered by local authorities and the new priority given to primary education, the government decided to take over responsibility for the payment of all primary teachers, including those in the private aided schools. In addition, the Education Act of 1959 gave the Ministry of National Education control of the administration of all private aided schools. As a consequence of this decision that teachers' salaries should be paid directly by the Ministry of National Education, expenditure on primary education by this ministry increased considerably and, in 1969/70, had reached a figure practically twice that for for 1967/68.

To enable the government to finance this increased expenditure, a new tax (sales tax) was introduced in 1969. In order, however, to reduce the effect of this tax on the cost of living, certain taxes hitherto imposed by the local authorities were abolished. The reduced responsibility of the local authorities for education was thus accompanied by a decrease in their fiscal revenue.

FINANCING OF THE OTHER LEVELS OF EDUCATION

Essentially, the state is responsible for the financing of the other levels of education. Local authorities do not participate in such financing, and fees are charged only in the case of foreign pupils. Foreign aid provides part of the finance, mainly in the form of a contribution to the payment of the salaries of foreign teaching staff. The way in which the foreign teaching staff is paid in Tanzania, however, makes it impossible to identify foreign aid of this kind. Foreign teaching staff are allocated to the various categories of teachers and levels of education on the basis of the same criteria as those adopted in the case of Tanzanian staff. The salaries and benefits received from the Tanzania Government are the same as those received by local staff. In general, however, foreign staff receive an 'expatriate allowance' from the country or organization concerned. At the moment, foreign staff teaching in Tanzania come from twenty-two different countries, and it is practically impossible to make any estimate of the additional income received from the countries concerned.

To conclude this brief analysis of the financing of education, it can be said that the trends in the past have been towards a greater centralization: central government is at present financing nearly all educational expenditure. The regionalization policy which was recently implemented and which aims at giving more initiative to the regions did not change this situation significantly. Only primary education came under the responsibility of the regional authorities and it is financed entirely by subsidies received from central government. We should also add that the growth of educational expenditure has been very rapid in

the past and, on the whole, its share of total GDP as well as of monetary GDP has increased (Table 12). In fact, three periods should be distinguished. During the interim plan (1962-64) educational expenditure as a percentage of GDP rose sharply; during the first five-year plan, it was more or less stable; and finally with the second five-year plan it increased again.

TABLE 12. Public educational expenditure as percentage of total and monetary GDP

Year	Expenditure (in million shillings)			Percentage of total GDP	Percentage of monetary GDP
	Current	Capital	Total		
1962/63	129.4	14.4	143.8	2.8	4.2
1963/64	135.5	14.5	150.0	2.9	4.4
1964/65	163.2	31.0	194.2	3.4	5.1
1965/66	177.4	25.7	203.1	3.3	4.9
1966/67	187.2	26.8	214.0	3.2	4.7
1967/68	202.8	24.3	227.1	3.2	4.7
1968/69	219.1	13.4	232.5	3.2	4.5
1969/70	255.7	28.6	284.3	3.9	5.1
1970/71	313.7	46.8	360.5	4.6	6.4
1971/72	374.4	34.9	409.3	4.4	6.2

SOURCE United Republic of Tanzania, *Appropriation accounts*.

Projection of educational expenditures during the present decade

In the previous chapter we tried to show the key aspects of the Tanzanian educational policy. We also tried to analyse the growth of enrolment and the trends of educational expenditure. In this section we will see what may be the prospects for the development of education during the present decade. To do so we will use as a basis the objectives set by the second five-year plan (1969-74) and also the long-term objectives of the government.

Projection of enrolment

We shall begin with enrolment in primary education and teacher training since these are linked together and have objectives independent of manpower needs.

Projection of enrolment in primary education and teacher training

PRIMARY EDUCATION

Two important decisions were made in the second five-year plan concerning the development of primary education. These decisions represent in fact a complete change in the policy concerning this level of education. While in the first five-year plan priority was given to the qualitative improvement of primary education, in the second five-year plan emphasis is put on quantitative expansion. Accordingly the first decision was to increase the intake ratio from 43.4 per cent in 1968 to 50 per cent in 1974, 60 per cent in 1979 and 95 per cent in 1989. The second was to increase the transition ratio between lower and upper primary so that the selective examination could be abolished in 1974.[1] From that date all the children admitted to primary education benefit from a

1. Hitherto primary education had consisted of two years of lower primary and three years of upper primary. A selective examination was held at the end of standard IV to determine which pupils should proceed to upper primary. For further details see above, page 32.

complete seven years of primary education. In reality, in recent years both new admissions and enrolment in standard V were greater than the figures estimated by the second five-year plan and it was to be expected that the target set by the plan would be surpassed (Table 13).

TABLE 13. Estimated and actual enrolment of standards I and V

Year	Standard I			Standard V		
	Five-year plan estimated enrolment (1)	Actual enrolment (2)	Ratio (2) to (1) (3)	Five-year plan estimated enrolment (4)	Actual enrolment (5)	Ratio (5) to (1) (6)
1969	163 300	157 986	0.97	69 100	71 198	1.03
1970	171 500	172 576	1.01	82 200	88 634	1.08
1971	180 000	190 091	1.06	98 900	102 608	1.04
1972	189 000	208 358	1.10	113 200	116 371	1.03
1973	198 400	—		127 800	—	
1974	208 350	—		147 300	—	

SOURCE Ministry of National Education, *Educational statistics handbook, 1969–72*, op. cit.

Taking this trend into account we have assumed that the intake ratio would reach 70 per cent in 1980, which is significantly higher than the estimate in the second five-year plan.[1] On the basis of this assumption, of the retention rates of primary education and of the trends of population growth, enrolment in primary education may be projected as shown in Table 14.

TABLE 14. Actual and projected enrolment of primary education 1968–80

Level	1968	1970	1972	1980
Standard I	155 802	172 576	208 331	354 200
Standard IV	136 449	138 458	144 139	278 900
Standard V	67 417	88 634	116 461	254 300
Standard VII	57 381	65 624	88 656	212 000
Total enrolment	765 169	827 974	1 003 596	1 961 100
Intake ratio	43.0	45.6	52.2	70.0
Transition ratio to upper primary	50.7	64.4	84.2	97.5

SOURCE 1968–70: Ministry of Education, *Educational statistics . . ., 1961–71*, op. cit.; 1972: Ministry of Education, *Educational statistics handbook, 1969–72*, op. cit.; 1980: IIEP projections.

The effect of the increase of the intake ratio and of the abolition of the selective examination between lower and upper primary on the enrolment pattern

1. The second five-year plan estimated that the intake ratio would be 60 per cent in 1979 and 95 per cent in 1989.

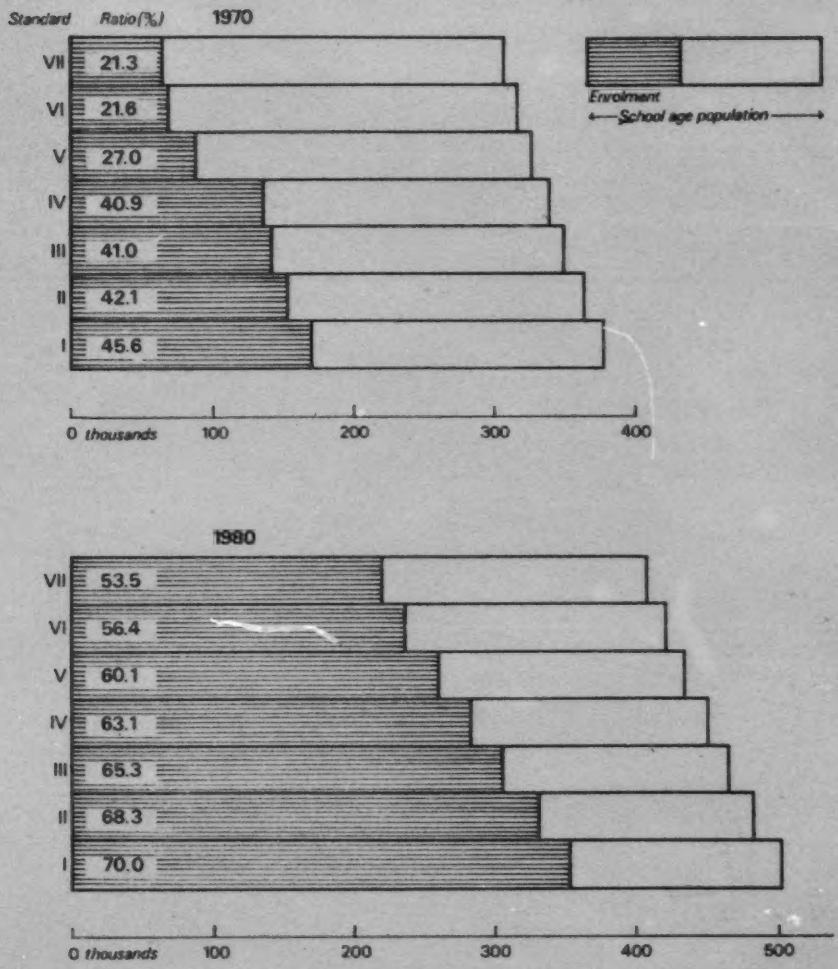

FIGURE 5. Primary-school-age population, enrolments and enrolment ratios, 1970–80.

is shown in Figure 5. The enrolment ratio of primary education will increase from 34.8 per cent in 1970 to 61.9 per cent in 1980. The increase is even higher for upper primary (from 23.4 per cent to 55.2 per cent).

As a result of the combined effect of population growth and the increase in the ratio, enrolment in primary education over the ten-year period will be multiplied by a factor of 2.4. However, the increase in enrolment will be greatest for standard VII, as a consequence of the abolition of the selective examination. Enrolments in standard VII will be more than three times greater in 1980 than in 1970. As we shall see, the development of secondary education is based strictly on future manpower needs and the increase in enrolment in the first form of secondary education will be appreciably smaller. As a result, access to secondary education will become increasingly difficult, and the transition ratio between primary and secondary schools,[1] already low (19.5 per cent) in 1970, will be still lower in the future.[2]

TEACHER TRAINING

As already stated, the second plan, confronted with the increase in enrolment in primary education, contained modifications of the previous policy concerning the improvement of teachers' qualifications. Not only will the training of grade C teachers be increased, but a new category of teachers has been established, namely grade C national service teachers, whose training will be of only one year's duration after completion of the national service. If the increase in enrolment in primary education is taken into account, together with the staffing formula now in force, the number of teachers required can be projected as shown in Table 15.

TABLE 15. Projection of teacher requirement, 1980

Year	Educational officers	Teachers			Total
		Grade A	Grade B	Grade C	
1972	292	6 568	4 924	10 242	21 926
1980	1 000	11 300	8 000	23 200	43 500

On the basis of the number of teachers required in the various grades, and the survival rate of teaching staff as a result of death, retirement and change of activity, enrolments in teacher-training colleges may be estimated as shown in Table 16. It is to be noted that while the grade C teachers usually receive two years of training, the grade C national service teachers receive only one year of training after completion of the national service. It has been assumed that one-third of all new grade C teachers will come from the national service.

1. Including grade C teacher training (see above, page 35).
2. This situation is illustrated in Figure 3 on page 36.

TABLE 16. Projection of enrolment in teacher-training colleges

Year	Educational officer grade III	Teachers			
		Grade A	Grade C	Grade C national service	Total
1972	219	1 659	2 112	868	4 858
1980	300	1 670	4 450	1 100	7 520

SOURCE IIEP projections.

In line with what has been decided in the second five-year plan the training of grade A teachers will be stabilized while that of grade C teachers will be largely increased.

Cost of primary education

Since the development of the other levels of education is based on future manpower requirements, we shall first give some details about the projections of manpower needs made by the Manpower Planning Division of the Ministry of Economic Affairs and Development Planning.

PROJECTION OF MANPOWER NEEDS

Based on various investigations and surveys carried out in 1964, 1968 and 1970, the Manpower Planning Division has worked out a manpower projection for the period 1970-90. This projection of total needs takes into account both losses in the existing manpower stock (retirement and deaths) and the need to replace expatriates. For lact of available data it did not include several large investment projects such as the Tanzania/Zambia Railways or the Kilimanjaro International Airport. It is true that in the Tanzania/Zambia Railways project a large proportion of the workers were directly supplied by the People's Republic of China. In addition, it included a built-in training programme for the Tanzanians (around 43,000) who worked for the project.

According to the 1967 census, the distribution of the active population by main occupational groups has been established as shown in Table 17. For comparison purposes, the number of wage-earners has also been included.

The data given in Table 17 call for the following remarks, which are of particular relevance to the problem of manpower predictions:

1. While the total active population was estimated at 5.6 million in 1967, the number of wage-earners is much smaller. In fact, they represented only 6.2 per cent of the active population.

TABLE 17. Active population and wage-earners in 1967

Sector	Active population		Wage-earners		Wage-earners as a percentage of active population
	Number	Percentage	Number	Percentage	
Agriculture	5 078 000	91.1	123 881	35.7	2.4
Manufacturing	91 500	1.6	31 186	9.0	34.1
Commerce	72 000	1.3	20 077	5.8	27.9
Transport and communication	44 500	0.8	29 725	8.6	66.9
Services	197 600	3.5	86 351	24.9	43.7
Others	93 800	1.7	55 515	16.0	59.2
TOTAL	5 577 400	100.0	346 735	100.0	6.2

SOURCE Active population: *1967 Population census*, vol. IV, Dar es Salaam, Bureau of Statistics, 1971. Wage-earners: United Republic of Tanzania, *Survey of employment and earnings 1970*, Dar es Salaam, 1972.

2. It is in the agricultural sector that most people worked (91.1 per cent) and it is also in the agricultural sector that the proportion of wage-earners is the smallest (2.4 per cent).
3. In the non-agricultural sector the proportion of wage-earners was more sizable (ranging from 27.9 per cent in commerce to 66.9 per cent in transport and communications), but the non-agricultural sector represented only 8.9 per cent of the total active population.

For the purposes of manpower projections, the various occupations have been divided into four broad categories:

Category A, for which a university degree is required.

Category B, for which additional training is required after completion of lower secondary education.

Category C, for which short periods of in-service training after completion of lower secondary education are required.

Category D, for which on-the-job training after completion of primary education is required.

Although, as we have just noted, the wage-earners represented only a small proportion of the active population, the number of occupations classified under categories A, B, C and D did not cover all the wage-earners. In 1969, for instance, the total number of occupations classified under categories A, B, C and D amounted to 83,217 while that of total wage-earners was 275,160. In other words categories A, B, C and D together represent only 30 per cent of wage-earners. Since manpower projections cover only these four categories of occupations, it is not surprising that the development of secondary and higher education, which should be in line with manpower needs, cannot be very rapid in the future. As a result, access to secondary education will be more and more difficult, as we will see later on.

Table 18 gives some details about the total requirement of the various categories of occupations as it has been projected by the manpower planning divi-

TABLE 18. Projected total manpower requirements, 1969–84

Category	Total projected requirement				Percentage of non-Tanzanians or vacant posts			
	1969	1974	1979	1984	1969	1974	1979	1984
Category A								
Science-based occupations	2 851	4 089	5 542	7 033	88.4	50.7	16.1	0.0
Arts-based occupations	3 017	4 261	5 459	6 649	59.2	28.3	4.5	0.0
TOTAL	5 868	8 350	11 001	13 682	68.9	39.2	10.3	0.0
Category B								
Health	1 889	3 686	6 018	7 348	45.5	36.8	17.2	5.7
Education	4 793	9 661	16 658	23 914	6.4	0.2	0.0	0.0
Technical occupations	2 223	3 270	4 537	5 962	52.9	12.6	0.0	0.0
Agricultural occupations	5 079	8 546	12 417	18 083	23.5	29.6	11.0	10.3
Other occupations	1 144	1 659	2 080	2 617	46.9	13.0	0.0	0.0
TOTAL	15 128	26 822	41 710	57 924	26.8	17.1	5.8	3.9
Category C								
Skilled office workers	25 409	35 206	48 605	60 692	19.0	3.8	0.0	0.0
Skilled manual workers	11 249	16 426	23 045	30 120	18.8	6.3	0.0	0.0
TOTAL	36 658	51 632	71 110	90 812	18.9	4.6	0.0	0.0
Category D								
Semi-skilled occupations	5 014	7 247	10 008	13 234	6.8	2.5	0.0	0.0
Education	13 682	18 873	31 126	45 013	0.0	0.0	0.0	0.0
Health	6 867	16 235	22 879	26 783	37.0	54.6	27.6	11.1
TOTAL	25 563	42 355	64 013	85 030	11.3	21.4	9.9	3.5

SOURCE Manpower Planning Division, Ministry of Economic Affairs and Development Planning, *Annual manpower report to the President, 1972*, Dar es Salaam, 1973.

sions. It also indicates the percentage of posts which are either vacant or filled by non-citizens.[1]

As can be easily seen, in 1969 the shortage of highly qualified manpower was still very acute, Out of 5,868 existing posts, 1,823 were filled by Tanzanian citizens, 3,423 by expatriates and 613 were vacant. In other words, the percentage of posts filled by Tanzanian citizens was only 31.0 per cent. The shortage was even greater in the science-based occupations, where the number of Tanzanian citizens was only 591, i.e. 11.6 per cent. In the other occupational categories the shortage was relatively less, but still sizable for paramedical occupations, technical occupations and agricultural occupations.

1. For more details about the methods used for manpower projections the interested reader may refer to the *Second five-year plan*, Volume IV, and to the various annual manpower reports to the President prepared by the Manpower Planning Division.

According to the target set out in the first five-year plan all the posts should be localized by 1980. Progress towards that target is encouraging and it is assumed that the number of posts filled by expatriates will be greatly reduced both in relative and real terms. In 1984, however, a certain number of posts will still be held by expatriates, and here again it will be in the sectors of health and agriculture.

On the basis of these manpower projections and taking into account both the loss of workers (resulting from retirement and death) and the localization target, the total requirements of the various categories of qualified manpower during the successive five-year periods have been estimated by the Manpower Planning Division as indicated in Table 19.

TABLE 19. Additional manpower requirements during the successive five-year periods, 1970–84

Category	1970–74	1975–79	1980–84
Category A			
Science-based occupations	2 522	2 632	2 690
Arts-based occupations	2 713	3 673	1 838
TOTAL	5 235	6 305	4 528
Category B			
Health	2 399	3 956	2 754
Education	5 455	8 366	9 154
Technical occupations	1 836	1 793	1 653
Agricultural occupations	5 220	7 700	8 494
Other occupations	829	699	640
TOTAL	15 739	22 514	22 695
Category C			
Skilled office workers	13 933	15 839	15 367
Skilled manual workers	6 487	8 266	8 213
TOTAL	20 420	24 105	23 580
Category D			
Semi-skilled occupations	2 504	3 227	3 727
Education	7 430	16 485	19 113
Health	12 509	16 607	11 713
TOTAL	22 443	36 319	34 553

SOURCE Manpower Planning Division, Ministry of Economic Affairs and Development Planning, *Annual manpower report ... 1972*, op. cit.

It is interesting to note that in spite of the assumptions of a rather large economic growth rate, the increase of manpower requirements will not be very high in the future.[1] As a matter of fact, if we exclude category B, manpower

1. It is true that manpower projections, as we have already indicated, cover only a small proportion of the wage-earners working in the modern sector. No assessment has been made, for instance, of the needs of the *ujamaa* villages.

requirements will be smaller during the period 1980–84 than during the preceding one. This is due to the fact that requirements during the 1970–74 period as well as during the 1975–79 period are partly inflated by the localization target. From 1980 onwards this target will be nearly achieved and the additional manpower requirements depending only upon economic growth will decrease.

PROJECTIONS OF ENROLMENT IN HIGHER EDUCATION

The University of Tanzania now has faculties of law, arts, science, medicine, agriculture and engineering. In general, overseas studies are not encouraged because they are not regarded as an effective means of training appropriate high-level manpower. There are, however, specialized subjects for which the estimated manpower need is so small that it would be very uneconomical to establish new appropriate university departments. A certain number of students continue to go to the Universities of Nairobi and Makerere, which were part of the University of East Africa and with which an arrangement still exists. A more sizable number are also undertaking studies abroad.

In 1971–72 the number of Tanzanian students attending courses at the three universities of Tanzania (Dar es Salaam), Nairobi and Makerere was 2,051. The breakdown by subjects in each university was as shown in Table 20. During the same year the number of Tanzanians studying abroad amounted to 1,185. The United Kingdom received by far the largest number. However, the United States and the U.S.S.R. also received a significant number. The break-

TABLE 20. Distribution of Tanzanian students by subject and by university in East Africa, 1971–72

Subject	Dar es Salaam	Nairobi	Makerere	Total
Arts				
B.A. General	477	2	37	516
B.A. Education	299	—	—	299
Others	101	119	22	242
SUBTOTAL	877	121	59	1 057
Science				
B.S. General	69	3	—	72
B.S. Education	259	—	—	259
B.S. Agriculture	114	—	15	129
Dip. Agriculture	130	—	—	130
Engineering	—	106	—	106
Medicine	135	—	93	228
Others	—	58	12	70
SUBTOTAL	707	167	120	994
TOTAL	1 584	288	179	2 051

SOURCE Ministry of National Education.

down by subject shows a high concentration in engineering, medicine and accountancy.[1]

On the basis of the manpower projections already referred to, the Manpower Planning Division has estimated, year by year, the required intakes in the various fields of higher education.[2] Taking into account these estimated intakes, the total number of Tanzanian students enrolled in higher education in 1980 may be projected as shown in Table 21.

TABLE 21. Projection of Tanzanian student enrolment in various universities

University	1971	1980	University	1971	1980
University of Tanzania			*Overseas universities*		
Arts	877	1 000	Arts	473	480
Science	707	1 800	Science	712	840
SUBTOTAL	1 584	2 800	SUBTOTAL	1 185	1 320
University of Nairobi			*All universities*		
Arts	121	30	Arts	1 530	1 570
Science	167	130	Science	1 706	2 800
SUBTOTAL	288	160	TOTAL	3 236	4 370
University of Makere					
Arts	59	60			
Science	120	30			
SUBTOTAL	179	90			

SOURCE IIEP projection on the basis of the required intakes in the various fields of higher education as estimated by the Manpower Planning Division.

In view of the present shortage of manpower in occupations requiring science degrees, the number of science students should increase at a high rate. In contrast, it is assumed that the number of arts students should level off. It is also assumed that the main increase in enrolment will take place in the University of Tanzania (Dar es Salaam) and that the enrolment of Tanzanian students at Nairobi and Makerere will decrease. This is particularly so for science students as a result of the creation and development of the Faculty of Engineering at Dar es Salaam.

PROJECTION OF ENROLMENTS IN UPPER SECONDARY EDUCATION

The analysis of the distribution of form VI leavers previously presented[3] shows

1. For more details see Tables 7 and 9 in the Appendix.
2. Manpower Planning Division, Ministry of Economic Affairs and Development Planning, *Annual manpower report ... 1972*, op. cit.
3. See above, page 40.

that about 60 per cent are admitted to the university, 30 per cent to other training institutions (educational officer grade III, Teachers' Training College, Institute of Development Training, etc.) and 10 per cent go directly into employment after appropriate pre-service training.

The planned output of upper secondary education will therefore depend largely upon the new intake of the university and of the other higher education institutions. On the basis of these intakes, enrolment in upper secondary may be projected as shown in Table 22.

TABLE 22. Projection of enrolment in upper secondary education

Year	Form V		Form VI		Total
	Arts	Science	Arts	Science	
1972	580	1 125	538	985	3 228
1980	800	1 800	730	1 700	5 030

PROJECTION OF ENROLMENT IN LOWER SECONDARY EDUCATION

Lower secondary-school leavers, i.e. form IV leavers, may either proceed to upper secondary, or continue their training in some institutions such as Teachers' Training College (grade A teachers), technical college, secretarial college, Civil Service Training Centre (category B occupations) or enter the labour market after some short non-formal pre-service training (category C occupations). In other words, the planned output of lower secondary is dependent upon the increase in intake of upper secondary and the requirements of category B and C occupations.

At present, private education plays a significant rôle at the lower secondary level. In 1972, new admissions in private lower secondary schools represented one-third of total admissions.[1] If we take into account the estimated intake into upper secondary education and the projected requirements in category B and C occupations, and if we make allowances for the probable development of private education, enrolment in public lower secondary education may be projected as shown in Table 23.

TABLE 23. Projection of enrolment in public lower secondary education

	Form I	Form II	Form III	Form IV	Total
1972	7 747	7 715	7 546	7 052	30 060
1980	10 000	9 600	9 300	9 000	37 900

SOURCE IIEP projections.

1. Enrolment in form I was 3,716 in private schools and 7,747 in public schools.

Since admissions to lower secondary education should increase only to the extent justified by manpower requirements, they will not follow the increase in the number of terminal primary-school leavers. This number will grow very rapidly as a result of the increase in the intake ratio for primary education and the abolition of the selective examination between standard IV and standard V. As a result, access to secondary education will become increasingly difficult (see Table 24).

TABLE 24. Transition ratio from primary to secondary education

Year	Enrolment in last grade of primary in previous year	Form I		First-year teacher training (grade C)	Transition ratio (%)			
		Public	Private		(2) to (1)	(3) to (1)	(4) to (1)	Total
	(1)	(2)	(3)	(4)				
1962	11 732	4 810	—	753	40.1	—	6.4	46.5
1972	70 502	7 747	3 716	2 081	11.0	5.3	3.0	19.3
1980	192 800	10 000	5 000	3 300	5.2	2.6	1.7	9.5

SOURCE 1962–72: Ministry of National Education, *Educational statistics handbook, 1969–72*, Dar es Salaam, 1973. 1980: IIEP projection.

This problem is fully recognized by the Tanzania Government and efforts have been made to change the primary curriculum so as to cope with the fact that this education will be terminal for a very large proportion of children.[1]

PROJECTION OF ENROLMENT IN TECHNICAL EDUCATION

Prior to independence there were two trade schools, at Ifunda and Moshi, which recruited primary-school leavers and gave training in various crafts. In 1966 these schools were converted into technical schools, and the curriculum, based on the trades with workshop emphasis, was dropped in favour of a curriculum similar to that of general secondary schools, but including engineering, workshop practice, theory and drawing. Only a small proportion of school leavers from Ifunda and Moshi proceeded to Dar es Salaam Technical College, which also recruited from the general secondary schools. With the recent introduction of vocational 'biases' in all secondary schools, the curriculum of Moshi and Ifunda Technical Schools will not differ greatly from that of other secondary schools.

In fact, Dar es Salaam Technical College is, at present, the only school which provides technical education. It recruits from form IV leavers and gives different courses according to different specializations: three-year courses for civil, mechanical and electrical engineering technicians; two-year courses for laboratory technicians; one-year or two-year courses for telecommunications technicians.

1. See above, pages 22–23.

After two years of practical experience the graduates from the three-year courses may also come back to the college for further education either in the field of supervision (two years) or in the teaching of technical subjects (two years in co-operation with the Changombe Teachers' College in Dar es Salaam).

The College also used to have regular form V and form VI programmes for students who wished to prepare for entry to degree courses in engineering but these have been phased out.

In 1972 enrolment at the Dar es Salaam College was 480, but the government is planning to expand the present facilities. In addition, with the assistance of the Federal Republic of Germany, a new technical college will be built at Arusha. When these two colleges are fully operational, total enrolment will reach 1,000.

Projection of recurrent expenditures

In our projection of recurrent expenditures, we will separate salary costs and non-salary costs. In the case of salary costs we will take into account the change in the qualifications profile of the teaching force and the change in the structure by length of service, but we will assume that the salary scales will remain unchanged. Although this assumption may appear optimistic, it is in line with past trends.[1] For the non-salary costs, apart from a few exceptions we have also kept unit costs at present levels. Later, when dealing with the problems of financing education in the future, we will see what may be the impact of a change in the salary scales or in the increase of non-salary unit costs.

Cost of primary education

In the past, primary education has been financed by a central-government subsidy to which were added contributions from local authorities.[2] At the end of 1968, however, because of the difficulties found by the local authorities in bearing the increasing burden of financing primary education, the government decided to take over the payment of teachers' salaries. At present, although the organization of primary education is taken care of by the regional authorities, nearly all its expenditures are financed by the central government.

According to the present salary scale, the average remuneration of teachers in the various grades, by length of service, is as shown in Table 25.

The rapid increase of enrolments over the present decade[3] will lead to an increase in the recruitment of teachers, and thus to a rejuvenation of the teaching force, i.e. a reduction in the average length of service. This will have the effect of slightly depressing the salary costs. On the other hand, the more

1. Since independence in 1961, the salary scale of civil servants has not been changed, apart from some slight reduction in salaries for the top-level civil servants.
2. See above, page 52.
3. See above, pages 54–55.

TABLE 25. Salary scale of teachers in the various grades

Length of service	Grade A	Grade B	Grade C	Grade C national service
0– 4	7 320	5 460	4 020	3 360
5– 9	9 360	6 960	4 980	4 380
10–14	11 760	8 880	6 300	5 460
15–19	12 720	11 280	8 040	6 970
20 and over	12 720	12 720	12 720	9 010

SOURCE United Republic of Tanzania, *Estimates of revenue and expenditure*, Dar es Salaam, 1969.

rapid development of the upper primary level will have the reverse effect, because the pupil/teacher ratio is lower.

If we take into account the increase in teacher demands resulting from the growth of enrolment, the loss of teachers due to changes of occupation, retirement and death and the present staffing formula, the distribution of the teaching force by type of qualification and by length of service in 1980 may be projected as shown in Table 26.

TABLE 26. Projection of the structure of the teaching force by qualification profile and by length of service in 1980

Length of service	Grade A	Grade B	Grade C	Grade C national service
0– 4	4 385	3 670	8 730	3 360
5– 9	3 985	2 070	2 290	2 490
10–14	2 520	720	1 670	—
15–19	280	940	1 610	—
20 and over	130	600	2 350	—
TOTAL	11 300	8 000	17 350	5 850

SOURCE IIEP projections.

On the basis of this structure of the teaching force, the cost to central government of primary education may be projected as shown in Table 27.

TABLE 27. Projection of the cost to the government of primary education (in thousand shillings)

Year	Cost of teachers			School materials	Other expenditures	Total
	Salaries	Allowances	Total			
1971/72	—	—	149 269	18 684	3 019	170 972
1979/80	300 360	12 620	312 980	36 530	5 800	355 310

SOURCE 1971/72: United Republic of Tanzania, *Appropriation accounts 1971/72*. 1979/80: IIEP projection.

Cost of teacher training

The salary cost of teacher training is made up of the salaries and allowances of the teaching staff and non-teaching staff and the training allowances allocated to students. In the teacher-training colleges three categories of teachers may be found, the senior educational officers, the graduate teachers (mainly for grade A students) and educational officers grade III (mainly for grade C students).

The non-salary costs include central administration costs, student travel, catering expenditures, school materials and miscellaneous costs.

On the basis of the projected enrolments, the total recurrent cost of teacher training in 1979/80 may be estimated as shown in Table 28.

TABLE 28. Projection of teacher-training costs (in thousand shillings)

	Salary costs			Non-salary costs					
Year	Salaries and allowances	Training allowances	Total	Central administration costs	Student travel	Catering expenditures	School materials	Other costs	Total	Total salary and non-salary costs
1971/72	6 561	3 245	9 806	3 103	448	2 456	811	1 063	7 881	17 687
1979/80	11 500	5 460	16 960	5 220	750	4 130	1 370	1 500	12 970	29 930

SOURCE IIEP projection.

Cost of secondary education

The teaching force in secondary education includes graduate teachers and grade III education officers. Because of the shortage of teachers some grade A teachers, normally trained for primary education, also teach in secondary education. In 1969 the proportion of expatriate teachers accounted for more than 50 per cent of the teaching force. In education, as in other fields, it is government policy to replace expatriates by Tanzanians, and in recent years the pro-

TABLE 29. Projection of the structure of the teaching force in secondary education

	Tanzanian teachers						
Year	Graduate teachers	Grade III education officers	Grade A teachers	Others	Total	Expatriate teachers	Percentage of expatriate teachers
1969	949	248	195	75	1 467	761	51.9
1970	1 117	287	164	82	1 650	682	41.3
1971	1 147	386	109	64	1 706	569	33.4
1972	1 065	523	79	85	1 752	...	...
1980	1 300	850	—	—	2 150	—	—

SOURCE 1969–72: Ministry of National Education, *Educational statistics handbook, 1969–72*, op. cit. 1980: IIEP projections. ... Data not available.

portion of expatriates in the teaching force has rapidly decreased. It is also proposed to replace the grade A teachers teaching in secondary education and according to the present plan this should be effected by 1977. This effort towards the localization and the improvement of qualifications of the teaching force is made possible by the relatively slow expansion of secondary education, which should develop only, as we have mentioned, to the extent justified by manpower needs. Taking these two objectives into consideration, the structure of the teaching force may be projected as shown in Table 29.

The replacement of expatriate teachers by Tanzanians will have the effect of decreasing the salary cost of graduate teachers in view of the fact that the expatriate teachers, who often have a great deal of experience, will be replaced by Tanzanians who have just graduated.[1] On the other hand the improvement of the qualification profile will lead to higher costs.

As a rule, all the secondary schools recruit on a national basis so as to allow for a better integration of the students coming from the various regions of the country. As a result all the secondary schools are boarding schools. The non-salary costs include student travel, catering expenses, school materials, maintenance of school and miscellaneous expenses. The various components of secondary education costs may be projected as shown in Table 30.

TABLE 30. Projection of secondary education recurrent costs (in thousand shillings)

Year	Salaries and allowances	Student travel	Catering expenses	School materials	Maintenance	Other costs	Total
1971/72	29 021	2 028	12 698	5 304	2 581	6 784	58 416
1979/80	37 400	2 600	16 400	6 800	3 800	8 250	75 250

SOURCE IIEP projection.

Cost of technical education

In line with the principle of 'education for self-reliance', all the secondary schools should have one or two 'vocational biases'. It may be said, therefore, that all secondary schools provide some form of technical education. In fact technicians are trained at the Dar es Salaam Technical College. According to the present plan this college will be extended and a new technical college will be opened at Arusha. The unit cost of technical education is much higher than that of secondary education both because of a lower pupil/teacher ratio and because of a higher cost in equipment and material. On the basis of the assumed increase in enrolment, the cost of technical education may be projected as shown in Table 31.

1. Expatriate teachers are recruited on the basis of the service criteria and are paid by the government according to the same salary scale as Tanzanian teachers, but they generally receive an 'overseas addition' from their country of origin.

TABLE 31. Projection of technical education costs (in thousand shillings)

Year	Salaries and allowances	Student travel	Catering expenses	School materials	Maintenance	Other costs	Total
1971/72	2 792	160	1 126	1 005	486	1 059	6 628
1979/80	6 500	400	3 300	2 500	1 200	1 500	15 400

SOURCE IIEP projection.

Costs of higher education

The main components of higher education costs are the subsidy to the University of Tanzania, the subsidies to the Universities of Nairobi and Makerere in relation to the number of Tanzanian students going to these universities, the bursaries of overseas students and contributions to the students' loan funds.

Taking into account the projected distribution of students among the various faculties of the University of Tanzania and the projected number of Tanzanian students going to the Universities of Nairobi and Makerere or abroad, the cost of higher education may be estimated as shown in Table 32.

TABLE 32. Projection of higher education costs (in thousand shillings)

Component	1971/72	1979/80
Internal subsidy		
University of Tanzania	30 826	52 400
Contributions to students' loan funds	3 500	7 000
Institute of Swahili Studies	150	300
SUBTOTAL	34 476	59 700
External subsidy		
University of Makerere	2 470	1 350
University of Nairobi	4 450	2 400
Other	1 778	1 200
SUBTOTAL	8 698	4 950
Bursaries overseas	2 354	3 150
Other expenditures	285	400
TOTAL	45 813	68 200

SOURCE IIEP projection.

As a result of the extension of the University of Tanzania, and particularly the Faculty of Engineering, the subsidy to that university will greatly increase while that to the Universities of Nairobi and Makerere will be reduced since

the number of Tanzanians students going to these universities is rapidly declining.

Cost of adult education and of the training programmes organized by other ministries

As we have mentioned previously, on 25 September 1972 TANU, the Tanzanian national party, passed a very important resolution stating that illiteracy should be wiped out completely by 1975. Although this target looks very ambitious, particularly in view of the brief period of time allotted to its attainment, it seems that progress towards it is very well advanced. Adult-education programmes are now organized in all regions of the country and enrolment figures published by the Directorate of Adult Education are very impressive[1].

Should this target be achieved and illiteracy wiped out by 1975, would it mean that no adult education programmes will take place from that date onwards? That would seem very unlikely, because literacy is not the only form of adult education. At present, the Tanzania Government, with the assistance of the World Bank, is planning to build and equip eight community education centres (CECs) in *ujamaa* villages of the Dodoma region. They are designed to support government plans for rural development. They will serve as primary schools but will also include basic facilities for instructing resettled adults in village crafts, agricultural activities, home science and health care. Courses for adults would be held in the late afternoon and evening. After an experimental phase, should the experiment be successful, it is intended that all primary schools should be transformed into CECs. This development of the CECs warrants that adult education, in one form or another, will continue in Tanzania after 1975.

It must be added that even in 1975 nearly half the children of school-going age will not be able to benefit from primary education. They are therefore potential clients for adult-education programmes.

In 1971/72 the total expenditure on adult education was 11 million shillings. Taking into account figures for enrolment in adult-education classes, this gave a very low unit cost. This was due to the fact that primary teachers and civil servants, such as extension workers, who were involved in the teaching of adult classes did not receive any extra pay.[2] Also, a certain number of voluntary teachers were recruited, mainly from primary-school leavers engaged in family farming, but they were paid only 30 shillings a month.[3] Most of the teaching materials are provided free by external assistance.

1. See above, page 47, and Table 6 in the Appendix.
2. More than half of all adult educators are primary-school teachers. Their teaching load with children has been cut by two hours a week, but they are required to teach adult classes six hours a week.
3. This is to be compared to the starting salary of grade C teachers, which is 180 shillings. It is, however, to be noted that the working load of the voluntary teacher is only six hours per week.

It is difficult to project the cost of adult education in the future. It will depend upon the subjects taught and the teaching materials used and it will also depend upon the way adult education will be organized in areas where primary education has not yet been developed. We have assumed a rather high increase in expenditure, precisely because with the gradual extension of adult-education programmes, it will be necessary to implement more and more in areas where no primary schools exist.

In Tanzania, at least nine ministerial departments are involved in some form of training: the Office of the Prime Minister, Central Establishment, Agriculture, Rural Development, Natural Resources and Tourism, Water Development and Power, Communications and Works, Labour and Social Welfare, and Health.[1] It is very difficult to project precisely the training expenditures of these ministries because many training programmes are new and their objectives are not as clearly set out as in the case of the Ministry of National Education. The figures given below should therefore be considered as rough estimates.

TABLE 33. Comparative distribution of expenditures by type and level of education, 1971/72 and 1979/80 (in million shillings)

Type and level of education	1971/72			1979/80			Annual rate of growth 1971–80 (%)
	Amount		Percentage	Amount		Percentage	
Expenditures of the Ministry of Education							
Central administration	19.7		5.9	30.0		4.9	5.4
Primary education	171.0		51.5	355.3		57.9	9.5
Teacher training	19.5		5.9	29.9		4.9	5.5
Secondary education	58.4		17.6	75.3		12.3	3.2
Technical education	6.6		2.0	15.4		2.5	11.2
Higher education	45.8		13.8	68.2		11.1	5.1
Adult education	11.0		3.3	40.0		6.4	17.5
SUBTOTAL		332.0	100.0		614.1	100.0	8.0
Expenditures of other ministries							
Rural education	31.8			60.0			
Industrial training	1.4			3.0			
Health training	4.8			10.0			
Civil Service training	2.3			3.5			
Institute of Development Management	2.1			5.0			
SUBTOTAL		42.4			81.5		8.5
TOTAL		374.4			695.6		8.1

SOURCE 1971/72: United Republic of Tanzania, *Appropriation accounts 1971/72*. 1979/80: IIEP projections.

1. See above, pages 43–47.

To give an overview of the educational expenditures at the end of the decade we have summarized, in Table 33, the projected expenditures for the various types and levels of education.

In spite of our assumption that the teachers' salary scale will remain constant, the annual growth rate of expenditure financed by the Ministry of National Education should be 8.0 per cent. A slightly higher rate has been assumed for the expenditures financed by other ministries. They represent, however, only about 13 per cent of the expenditures of the Ministry of National Education.

In so far as the various levels of education are concerned, adult education and technical education have the highest growth rate, but even at the end of the decade their proportion of total expenditures will not be very high.

The share of primary education which was already predominant in 1971/72 will increase further in 1979/80. This is in accordance with the present policy of giving high priority to primary education so as to achieve universal primary education. By the end of the 1980s the proportion accounted for by the cost of teacher training, in contrast, will decrease in spite of the fact that teacher training is to be increased. This may be explained by the fact that the training of grade C teachers (whose unit costs are lower) will increase more rapidly than that of grade A teachers. In addition, the training of grade C (national service) teachers is reduced to one year instead of two.

It should also be noted that expenditures on secondary education, and to a lesser extent expenditures on higher education, will increase at a slower rate than total expenditures. As we have already mentioned, the development of enrolment in these two levels of education has to follow that of manpower requirements. As a result, access to secondary education will become increasingly difficult for primary-school leavers.[1]

Projection of capital expenditures

The capital expenditures of the various levels of education have fluctuated very much in the past. The irregular trends of capital expenditures are due to the gradual implementation of various educational projects. The proportion of capital expenditures devoted to one specific level of education may thus vary widely from one year to the other. In some instances, delays in unblocking foreign-aid credits have postponed the implementation of certain projects so that actual expenditures may diverge widely from planned expenditures.

For these reasons, it is difficult to project capital expenditures for a specific year. These expenditures depend not only upon the planned requirements but also upon the scheduling of the different projects. In addition, it is very difficult to make assumptions about building costs. In recent years, for instance, building costs have increased at a very rapid rate. The figures given here (Table 34) should therefore be considered only as an order of magnitude.

1. See above, pages 64–65.

TABLE 34. Projections of capital expenditures (in million shillings)

Sector	1969/70	1970/71	1971/72	1979/80
Central administration	2 389	1 716	384	2 000
Primary education	14 674	20 123	9 300	55 000
Adult education	452	2 028	—	
Teacher training	4 597	7 301	3 484	9 000
Secondary and technical education	3 021	10 338	19 271	13 000
Higher education	3 425	5 138	2 453	2 000
Other	45	186	—	500
TOTAL	28 603	46 830	34 892	81 500

SOURCE 1969–72: Actual expenditures from appropriation accounts. 1979–80: IIEP projections.

The destination of capital expenditures by level of education is rather different from that of current expenditures. Capital expenditures depend upon the growth of enrolment and, therefore, are very sensitive to any change in the growth rate.

Taking into account the present policy of creating CECs, which offer facilities for both primary education and adult education, capital expenditures of these two types of education have been projected together. Their share of expenditures is the highest by far, for it is in primary education that the growth of enrolment will be the most rapid. As a consequence, the requirement of additional teachers will increase and hence facilities for teacher training. In comparison, the capital expenditures of the other levels of education appear to be relatively lower.

As can be seen from the projections presented above, the implementation of the educational target set by the Tanzania Government will lead to a very rapid increase of both recurrent and capital expenditures, even if teachers' salary scales remain constant and non-salary unit costs are maintained more or less at their present level, Will these expenditures represent too heavy a burden for the economy and for the national budget? Under what conditions may they be financed? What may be the effect of an increase in teachers' salaries? These are some of the problems which we will deal with in the next part of this report.

Part II

The financing of education expenditures: past situation and prospects up to 1980

Introduction

We have attempted in Part I to analyse the Tanzanian educational policy, to show how it has been implemented in the past, and what may be the prospects for the future. On the basis of the objectives set by the Tanzania Government for the various levels and types of education we have also tried to arrive at an estimate of the expenditures on education which will have to be financed by the government. According to this estimate, recurrent and capital expenditures on education will amount respectively to 700 and 82 million shillings at the end of the decade.

The financing of educational expenditures, particularly in a country where a very large share is borne by the government, either directly or through the means of subsidies, depends very much upon the level of public revenues and upon their allocation to the various sectors of government activities. However, the level of public revenues is closely related to the growth of the economy. In other words, the analysis of the financing of educational expenditures cannot be separated from that of economic growth. This is why we will try to see what the economic growth has been in the past and what its prospects may be during the present decade. We will also try to see what has been the effect of economic growth on the level of public revenues and the way they are allocated. Taking all these elements into account we will try to analyse in a more detailed manner the problem of financing educational expenditures.

Economic growth: past trends and prospects for the 1970s

Economic planning plays a very important role in Tanzania. This is hardly surprising when taking into account the planned development path the country has chosen. Since independence in 1961, three economic and social development plans have been drawn up. The first plan, covering the period 1961–63, was an interim plan and its main object was merely the programming of public investment. Only in 1964, when the first five-year plan was launched, could it be said that economic planning really started in Tanzania. This plan was concluded in 1969 and was followed by a new five-year plan (subsequently extended by one year), which is still in the process of being implemented.

Economic growth during the first and second five-year plans

National accounting in Tanzania has made remarkable progress in recent years. Up to 1969, the figures published concerning the main national accounts' aggregates were based on a national accounting system brought into effect in 1962. That system had to take into account the type of data which were available at that time. Its coverage of the various economic sectors was not complete and because of a lack of accurate information a certain number of assumptions had to be made. As a result there was a sizable underestimation of the production of some economic sectors. This was particularly the case in the subsistence sector.

A remodelling of the system was started in 1968 and all the national accounts from 1964 onwards have been revised according to the new system. We consequently have two sets of accounts, one based on the old system and covering the period 1962–68 and the other based on the new system and covering the period 1964–72. When these two sets are compared, large differences can be seen, particularly in the non-monetary system. On the whole, it seems that the old system led to an underestimation of gross domestic product (GDP) of the order of 20 per cent.

The second set of accounts, based on an improved method of data collection and processing, is certainly more accurate than the first, but it does not go back any further than 1964. This is why when analysing past economic growth we shall restrict ourselves to the period 1964–72 for which we have relatively more reliable data.

Before examining the economic growth, sector by sector, it would be of interest to compare the overall targets set by the first and second five-year plans, and the actual achievements, as far as they can be assessed from the latest data available since the second plan has not yet been completely implemented.

These targets were quite ambitious; they aimed at a 6.7 per cent annual growth of total GDP for the first plan period, 1964–69, and at a 6.5 per cent growth for the second plan period. This would imply, for the two plan periods, a growth rate for the monetary sector of respectively 8.1 per cent and 7.6 per cent.

The economic projections made for the first and second five-year plans were based on the old system of national accounting. Because of the change in the method of establishing the national accounts which took place in the meantime, it is not possible to compare the projected figures. Hence, the comparison made in Table 35 will not be in terms of production estimates, but rather in terms of growth rates of the various sectors.

TABLE 35. Annual growth rates by sector: plan targets and actual achievements

Sector	Million shillings			1964–69		Second plan target, 1969–74	Actual growth 1969–72
				First plan target	Actual growth		
	1964	1969	1972	%	%	%	%
Subsistence agriculture	1 377	1 588	1 752	2.1	2.9	3.0	3.0
Monetary agriculture	1 246	1 492	1 614	5.2	3.7	7.2	2.7
Mining and quarrying	141	148	137	4.7	0.9	−2.5	−2.6
Manufacturing and handicrafts	394	687	832	14.8	11.8	13.0	6.6
Electricity and water supply	51	82	112	12.3	9.9	10.0	11.0
Construction	190	293	367	12.7	9.1	12.0	7.8
Commerce	670	973	1 118	8.0	7.8	8.0	4.7
Transport and communications	387	644	845	7.8	10.7	9.0	9.5
Finance, insurance and real estate	543	660	707	8.4	4.0	6.0	2.3
Administration	620	771	1 020	6.5	4.4	5.0	9.8
TOTAL	5 619	7 338	8 504	6.7	5.5	6.5	5.1

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

It is true that, taken over all, the two main targets of the plans were not achieved, and actual growth was less than what had been projected. This was particularly so for monetary agriculture, construction and manufacturing industries. The development of the transport sector, however, was more rapid than expected. It should also be noted that the contribution of administration increased greatly during the implementation of the second plan.

There are two main reasons for the plans' ambitious targets not having been achieved. The first one lies in the fact that actual investment was lower than what was assumed in the first plan, because of the failure of certain external financing sources. The second one is found in the difficulties encountered in the sector of monetary agriculture, i.e. agriculture for export. The fall in prices of external markets, particularly the fall in the price of sisal, had a considerable impact not only on the value of production, but also on the value of the country's exports. Taking these adverse events into consideration, it may be said however that economic growth, during the period under review, was steady and maintained a relatively high rate.

Furthermore, it is unfair, and indeed incorrect, to judge economic figures in a country like Tanzania by referring only to the growth of GDP. During the period under review, and particularly since the Arusha declaration of 1967, much progress has been made in the 'socialization of the economy'. Banks, large firms, wholesale trade and building for rent have been nationalized, one after the other. The parastatal enterprises are now playing a key role in the building of a socialist and self-reliant economy. They control the key sectors of economic activity and employ nearly 60,000 persons, i.e. accounting for 20 per cent of wage employment. Over 10 per cent of GDP is generated by them. Their receipts went up from 1,280 million shillings in 1966 to 4,290 million shillings in 1971, while their gross capital formation increased from 102 to 447 million shillings.

During this same period, and particularly in the last last few years, there has been a rapid development of *ujamaa* villages in rural areas. This programme is of utmost importance for a country where more than 90 per cent of the population live in rural areas. The *ujamaa* villages are being developed in order to be the focal points for economic and social projects in which work is organized on a community and co-operative basis. Their population should be large enough to warrant the location of basic investments such as electricity, running-water supplies, schools and sanitary infrastructures, etc.

At the beginning of 1972, the *ujamaa* villages numbered 4,484, and the population living in them amounted to 1.6 million, i.e. about 12 per cent of the total population of the Tanzania mainland (Table 36). Although allowances should be made for differences in the definition of an *ujamaa* village used in different regions, it is clear that the development of this programme has varied very much from one region to the other. In Table 36 the different regions have been ranked according to the percentage of the total population living in *ujamaa* villages.

In Mtwara nearly 60 per cent of the total population lived in *ujamaa* villages.

TABLE 36. Distribution of *ujamaa* villages in the various regions at the beginning of 1972

Rank	Regions	Number of villages				Population	Percentage of total population	Average size of village
		I	II	III	Total			
1	Mtwara	727	21	—	748	371 560	58.1	497
2	Lindi	524	66	2	592	203 128	47.1	343
3	Dodoma	227	17	2	246	239 366	30.0	973
4	Iringa	628	—	23	651	216 200	27.8	332
5	Mara	308	54	14	376	127 371	20.8	339
6	Singida	194	7	—	201	51 230	10.6	255
7	Coast	95	—	26	121	93 503	10.2	773
8	Mbeya	490	3	—	493	64 390	5.9	131
9	Kigoma	117	15	—	132	27 200	5.4	206
10	Ruvuma	190	15	—	205	20 500	4.6	100
11	Tanga	96	35	1	132	35 907	4.2	272
12	Tabora	59	2	20	81	81 408	2.8	227
13	Arusha	47	11	1	59	14 018	2.0	238
14	Mwanza	124	3	—	127	18 641	1.6	147
15	Morogoro	112	—	1	113	10 513	1.5	93
16	West Lake	26	12	8	46	9 491	1.3	206
17	Shinyanga	150	—	—	150	12 265	1.2	82
18	Kilimanjaro	11	—	—	11	2 616	0.4	238
TOTAL		4 125	261	98	4 484	1 599 307	12.0	357

SOURCE United Republic of Tanzania, *The economic survey, 1971–72.*

In the Kilimanjaro region, however, the proportion was only 0.4 per cent. Thus, success in implementing *ujamaa* village plans has been varied and has differed very much according to the various areas. The average population of the villages was 360, but here also there were large differences. The range varied from 82 in Shinyanga to 973 in Dodoma. In general, in the regions where the *ujamaa* movement was well developed and well implemented, the average size was larger.

The progress-reporting system distinguished three stages in the development of an *ujamaa* village. Stage I corresponded to the 'formative' stage; stage II required that villagers should learn to live and work together, have a workable constitution and be economically viable; in stage III, the villages should be economically self-reliant and capable of handling credit so as to be registered as multipurpose co-operative societies. In 1972 most villages were still at stage I, but 261 were classified as at stage II and 98 as at stage III.

Initially, centrally administered planning teams were sent out to selected regions to encourage the involvement of the villagers and local experts in drawing up plans and identifying bottlenecks and projects in *ujamaa* villages. However, as a result of hasty planning, plans were too uniform, and planning teams tended to do the planning for the people instead of encouraging participation by the villagers in order to ensure better implementation. Furthermore, the teams accepted over-optimistic estimates of communal acreage and of

increases in production. They were also induced to assume that the government had unlimited funds for *ujamaa* village development and little was done to mobilize village resources.

One of the main obstacles to the development of *ujamaa* villages was and still is the lack of leadership and of managerial skills among the village members. To remedy this situation the government started to conduct three months' courses in farm and village management for leaders from *ujamaa* villages in eleven selected regions: Mtwara, Lindi, Iringa, Mara, Singida, Mbeya, Kigoma, Ruvuma, Tanga, Tabora and Arusha. In most cases these courses are given at existing rural training centres and are organized by the Ministry of Regional Administration and Rural Development in co-operation with TANU.

Growth by sector

Production in the various sectors in 1964 and in 1972 can be seen in Table 37, which shows the overwhelming importance of agriculture in the country's economy. In 1964 it accounted for 47 per cent of the total production. Since then, this proportion, though fallen, still remains large.

TABLE 37. GDP at constant prices 1964–72 (in million 1966 shillings)

Sector	1964			1972		
	Amount		Percentage	Amount		Percentage
Primary sector						
Agriculture	2 623		46.7	3 366		39.6
Mining and quarrying	141		2.5	137		1.6
SUBTOTAL		2 764	49.2		3 503	41.2
Secondary sector						
Manufacturing and handicraft	394		7.0	832		9.8
Electricity and water supply	51		0.9	112		1.3
Construction	190		3.4	367		4.3
SUBTOTAL		635	11.3		1 311	15.4
Tertiary sector						
Commerce, restaurants and hotels	670		11.9	1 118		13.1
Transport and communications	387		6.9	845		9.9
Finance, insurance and real estate	543		9.7	707		8.3
Public administration	620		11.0	1 020		12.1
SUBTOTAL		2 220	39.5		3 690	43.4
TOTAL (AT FACTOR COST)		5 619	100.0		8 504	100.0

Manufacturing, which was practically non-existent at the time of independence, has made rapid progress. Production here has more than doubled between 1964 and 1972, but its share of GDP is still a modest one.

The service sector, which includes public administration, accounted for a very large share of GDP and this share has been increasing between 1964 and 1972, since the growth of the service sector has been more rapid than that of total GDP.

The growth of agricultural production

We can gain only a rough idea of the value of agricultural production because subsistence farming is still very sizable. At present, production here is higher than in monetary agriculture. The latter, however, is of considerable importance since it accounts for 70 per cent of the country's exports.

It was a peculiar feature of the period 1964–69 that the growth in real terms of the production of monetary agriculture was higher than that at current prices because of the fall in prices. While the volume of production increased by 3.7 per cent per annum, its value declined slightly. The trend was just the opposite during the 1969–72 period. Taking agriculture as a whole, actual production was lower than the plan targets, during both the first and second plans. This was particularly so for monetary agriculture.[1] This fall in price is even more striking when comparing the trends of the volume and value of production. There was a remarkable increase in the volume of production of all crops, with the exception of sisal. However, this increase in quantity was not matched by corresponding increases in the market value of production. The fall in price was very sizable for sisal and sugar. In the case of sisal the volume of production went down from 230 million metric tons in 1964 to 181 million in 1971 as a result of the lack of local interest in this crop. The decline in value, however, was much greater, since in 1971 it amounted to less than one third of its 1964 level of value. The impact of the fall in prices on the value of total production was a considerable one, since sisal had the major position in the country's monetary agriculture. For sugar, although the volume of production went up by 58 per cent between 1964 and 1971, its value, in fact, went down by 31 per cent. This again gives an idea of the disastrous effect of the fall in prices. (Table 38).

Growth of the industrial sector

The contribution of the mining sector to GDP, which has always been very small, has tended to fall. In 1972, the contribution was only 1.2 per cent. In fact, production has been virtually stagnant. The main output is diamonds, gold, semi-precious stones, wolfram, salt, tin and mica. Diamonds account for about 80 per cent of total production. Their extraction is at present running into difficulties because of the progressive working out of the mines. Production went up from 136 million shillings in 1964 to 233 million in 1967, but fell off to 124 million shillings in 1972. Gold production is meeting with the same

1. For more details see Table 11 in the Appendix.

TABLE 38. Production of the main agricultural commodities (quantities in million metric tons; value in million shillings)

Commodity	1964		1971		Rate of growth, 1964–71	
	Quantity	Value	Quantity	Value	Quantity	Value
Cashew nuts	72.9	46.6	126.3	115.7	8.2	13.9
Coffee	31.3	164.2	45.8	231.3	5.6	5.0
Cotton	52.4	172.7	66.0	220.0	3.4	3.5
Pyrethrum	2.3	12.2	3.7	13.2	7.0	1.2
Sisal	229.9	468.7	181.1	141.9	−7.5	−18.5
Sugar	60.5	55.6	95.8	38.3	6.8	−5.5
Tea	4.7	30.5	10.5	61.6	12.2	10.5
Tobacco	2.1	12.2	11.9	49.2	28.0	22.0

SOURCE United Republic of Tanzania, *The economic survey, 1971–72.*

difficulties and has been in continuous decline over the period under review. There are probably oil reserves, but they are not yet being exploited.

Development in the industrial sector has been rapid and its contribution to GDP went up from 10.4 per cent in 1964 to 16.1 per cent in 1972.

TABLE 39. Value added by the secondary sector: planned targets and actual achievements 1964–72

Subsector	Amount (in million shillings)			Growth rates (%)			
				1964–69		1969–72	
	1964	1969	1972	First plan target	Actual	Second plan target	Actual
Manufacturing and handicrafts	394	687	832	14.8	11.8	13.0	6.6
Electricity and water supply	51	82	112	12.3	9.9	10.0	11.0
Construction							
Monetary	142	238	307		10.9		8.8
Non-monetary	48	55	60		2.8		2.9
SUBTOTAL	190	293	367	12.7	9.1	12.0	7.0
TOTAL	635	1 062	1 311	14.0	10.8	12.5	7.3

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

The production targets set in both the first and the second plan for the secondary sector were very ambitious: 14 per cent and 12.5 per cent respectively (Table 39). The planned targets were nearly achieved in the electricity and water-supply sector. In the construction sector actual achievement fell short of the target. This result would have been better if reference was made only

to monetary construction. However, the Tanzanian national accounts system also included non-monetary construction, which corresponded to the building of dwellings in rural areas. In this subsector it is assumed in the accounts system that the growth rate is more or less the same as the increase in population.

During the first five-year-plan period manufacturing industries experienced a growth in real terms of nearly 12 per cent per annum. However, it would seem that any further expansion will be more difficult. It should be said that the two main activities of the manufacturing sector are, first, the production of consumer goods for local consumption and, second, the processing of raw materials for export. The limited size of the internal market and the export problems encountered have probably accounted for the increase in production being slowed down between 1969 and 1972.

As can be seen from Table 40, which gives the value added by the various manufacturing industries, household and cottage industries still have an important position in the national economy. Their contribution in 1964 amounted to one-third of total industrial production. Growth in these industries was, however, less rapid and the share has since declined.

TABLE 40. Value added by the manufacturing and handicraft sector, 1964–70 (in million shillings)

Industry	1964		1970	
	Amount	Percentage	Amount	Percentage
Automobile assembly and repair	22	5.9	47	5.9
Beverage industries	13	3.5	38	4.8
Chemical industries	10	2.7	79	10.0
Clothing industries	8	2.2	39	4.9
Food processing	68	18.3	115	14.5
Household and cottage industries	125	33.7	209	26.4
Metal-work	22	5.9	35	4.4
Textile industries	32	8.5	107	13.5
Tobacco manufacturing	16	4.3	30	3.8
Sawmilling and carpentry	20	5.4	31	3.9
Miscellaneous industries	35	9.4	63	7.9
TOTAL	371	100.0	793	100.0

SOURCE United Republic of Tanzania, *National accounts 1964–70*, Dar es Salaam, 1972.

In the manufacturing industries, three subsectors deserve particular attention, namely the food industry (used here in the broad sense of food, beverages and tobacco), the textile industry and the chemical industry.

The food industry is the largest subsector with a contribution of nearly one-quarter to total production. The textile industry has grown very rapidly and is on the way to catching up in importance with the food industry. The growth of the chemical industry has also been remarkable, and its contribution has significantly increased.

Growth of the service industries

Development in the service industries was about the same during the two successive periods 1964–69 and 1969–72. It amounted to 6.5 per cent, i.e. a rate slightly higher than that of total GDP, so that its contribution to the latter went up from 37.8 per cent to 42.7 per cent. This growth, however, was lower than what had been planned.[1]

The trade and tourist industry showed remarkable development during the first five-year-plan period. This development tended, however, to slow during the 1969–72 period, possibly as a result of the nationalization of large trade companies after the Arusha declaration. In 1967 a national trading company, the State Trading Corporation (STC), was set up to take over a number of big private firms. Apart from the STC, a large number of specialized parastatal enterprises have been created to take care of the marketing of the country's main products (sisal, coffee, tea, tobacco, sugar, etc.) and to foster the tourist industry. At present it may be said that all the foreign and wholesale trade has been nationalized. Of course, the nationalization of trading, at least in its early stages, met with numerous problems arising either from ill-will or lack of co-operation on the part of private enterprises or from the lack of experience of the managers of the newly created parastatal enterprises. The STC in particular has been seriously criticized and it is now being completely reorganized.

In the finance, insurance and real estate sectors, growth was also lower during the period 1969–72. However, a distinction should be made here between the monetary and the non-monetary contribution. The Tanzanian national accounts system included not only the rents usually going to the monetary sector but also the rental value of buildings for dwelling purposes. During the period under review this non-monetary contribution deserves to be mentioned for it amounts to nearly 80 per cent of the total contribution.

The growth of other services (which include administration) was also very different during the two periods 1964–69 and 1969–72. During the first, it was modest, and in 1969 the contribution of this sector to total GDP was smaller than in 1964. During the second period the trend was completely reserved and the growth of this subsector was very rapid, reaching, in real terms, almost 10 per cent per year, double what was planned.

Among the service industries, the greatest progress took place in the transport sector. Its growth was greater than had been projected in the two successive plans. Land-based transport still had the lion's share, having benefited considerably from Zambia's transit trade. The development in sea and air transport has also been substantial.

1. For more details see Table 13 in the Appendix.

Capital formation

From the previous analysis it can be said that actual growth in nearly all sectors was lower than had been projected in the first five-year plan. It is too early to judge the results of the second five-year plan because it is still being implemented. However, from the latest available data, i.e. the data of the 1969–72 period, it can also be seen that it would be difficult for it completely to achieve its ambitious targets.

Since capital formation plays a key role in economic growth it would be of interest to analyse in detail the amount of capital formation required by the two successive plans and the way it has been financed.

Capital formation required in the first and second five-year plans

The first five-year plan called for capital formation of 4,920 million shillings (Table 41). In actual fact the amount of investment was lower.

TABLE 41. Projected and actual capital formation (in million shillings)

Government/total investment	Projection of the first plan	Actual implementation	
		Amount	Percentage
Government investment	1 601	1 383	86.4
Total investment	4 920	4 511	91.7

SOURCE Government investment: United Republic of Tanzania, *The economic survey, 1970–71*, Dar es Salaam, p. 165. Total investment: United Republic of Tanzania, *National accounts 1964–1970*, op. cit.

Bearing in mind the price rises which took place during the first plan period it may be estimated that actual investment amounted to about 80 per cent of the total called for under the plan. This short-fall resulted partly from the fact that the first plan was over-optimistic about foreign-aid possibilities. It expected that external sources would finance 70 per cent of public investment. In the end, the figure was only about 30 per cent.

The target set in the second five-year plan was even more ambitious. The amount of capital formation required for the implementation of the plan was 8,100 million shillings, i.e. 80 per cent more than had been achieved during the first one. The distribution of investment by major sectors and by financing sources was projected as shown in Table 42.

It was proposed in the plan that the public sector should play a major rôle in gross fixed-capital formation and that private investment, including housing, should account for one-fourth of total investment.

The central government does not finance all the investments made by the public sector. The parastatal enterprises and the East African Community enterprises have their own financing system. None the less the state carries a heavy

TABLE 42. Distribution of investment by major sector, by economic agent and by financing sources, 1969–74 (in million shillings)

Type of investment and financing sources	Central government	Parastatal enterprises	East African Community enterprises	Private sector	Total	Percentage
Type of investment						
Research	171	2	—	—	173	2.1
Electricity and water supply	245	457	—	—	702	8.6
Economic infrastructure	1 628	64	580	275	2 547	31.4
Directly productive activity	217	1 417	—	1 275	2 909	35.8
Social infrastructure	316	348	—	600	1 264	15.6
Administration and security	173	—	—	—	173	2.1
Other investments	305[1]	147[2]	—	—	352	4.4
TOTAL	3 055	2 435	580	2 150	8 120	100.0
Financing sources						
Public salary	620	—	—	—	620	7.6
Government borrowing	685	610	—	—	1 295	15.9
Parastatal enterprises	—	1 003	—	—	1 003	12.4
EAC enterprises	—	—	200	—	200	2.5
Private sector	—	—	—	2 150	2 150	26.5
Other	150	—	—	—	150	1.8
SUBTOTAL	1 455	1 613	200	2 150	5 418	66.7
External sources	1 600	822	380	—	2 802	33.3
TOTAL	3 055	2 435	580	2 150	8 120	100.0

1. Tanzania/Zambia Railway (TAZARA).
2. National development credit agency and national small-industries' corporation.

SOURCE United Republic of Tanzania, *Second five-year plan*, Dar es Salaam, 1969.

burden, having to take care of the development expenditure of the various ministries and the subsidies granted to the parastatal enterprises.

Two-thirds of total investment has to be financed by internal sources, and the remainder by external sources. The propositions from domestic and external sources are roughly the same as those of the first plan, but the total amount of investment is considerably higher.

The sectors concerned directly with production (including electricity and water) took only 40 per cent of total investment. The rest was for investment on economic, social and administrative infrastructures. In fact, it was investment in economic infrastructures, in particular the building of the Tanzania/Zambia railway, which took the largest share. By comparison, investment for social purposes was much lower, and half of it actually went into the building of dwellings for private purposes.

Share of capital formation in total GDP

Because of this high concentration of investment on the infrastructure, the increase in capital formation was much more rapid than that of total GDP, and the share of capital formation in total GDP rose sharply in recent years. The trend from 1964 to 1972 was as shown in Table 43.

TABLE 43. Capital formation and gross domestic product at factor cost, 1964–72 (in million shillings)

Year	Monetary-capital formation	Monetary GDP	Ratio, (1) to (2)	Total capital formation	Total GDP	Ratio, (3) to (4)
	(1)	(2)	(%)	(3)	(4)	(%)
1964	527	3 824	13.8	674	5 594	12.0
1965	635	3 845	16.5	789	5 671	13.9
1966	841	4 454	18.9	991	6 548	15.2
1967	1 097	4 688	23.4	1 271	6 792	18.7
1968	1 147	4 991	23.0	1 318	7 205	18.3
1969	1 057	5 335	19.8	1 217	7 554	16.1
1970	1 645	5 869	28.0	1 815	8 222	22.1
1971	2 182	6 273	34.8	2 359	8 846	26.7
1972	2 100	6 975	30.1	2 298	9 850	23.3

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

During the first five-year plan, monetary-capital formation as a percentage of monetary GDP rose from 13.8 per cent in 1964 to 23.0 per cent in 1968. There was some slackening in 1969, but in 1970, with the implementation of the second five-year plan, the advance continued and in 1971 the percentage of monetary-capital formation in monetary GDP reached the remarkable level of 34.8 per cent. This was made possible only by the financing from external sources of very large projects such as the Tanzania/Zambia Railway (TAZARA). As we will see later, the rapid increases in the share of capital

formation resulted not from any reduction of private or public consumption but rather from the widening of the external trade deficit.

Since most of the investments are made in the monetary sector, total capital formation as a percentage of total GDP appears to be lower, but it is still substancial when compared with that of other developing countries. This situation may however be temporary, and with the completion of the TAZARA project, the level of capital formation may decline.

Distribution of capital formation by economic sector

The growth of the various sectors showed much variation. It was very low in the non-monetary sectors, the investment of which fell from 22 per cent of total investment in 1964 to 9 per cent in 1972. It is true that non-monetary-capital formation relates only to the building of dwellings or to herd increase.

In the monetary sector the investment share in building also went down from 22 per cent to 15 per cent during the same period in spite of a steady growth. Investment in equipment and machinery showed some fluctuations during the period. Their share, however, has always been sizable and reflected the industrial development which we have already noted.

The sector which experienced by far the highest growth in capital formation was the infrastructure (land improvement, roads, water supplies, etc.), whose share rose from 15.7 per cent in 1964 to 41.2 per cent in 1972. It is to be noted that investment under the TAZARA project was included in 'other infrastructures'. This explains the very high figures related to this item in 1972.[1]

Distribution of capital formation by economic agent

The state and the parastatal enterprises have played a key role in this large increase in capital formation. If we take the public sector as a whole, including the state, the local authorities, the EAC enterprises and the parastatal enterprises, its share in total capital formation went up from 35 per cent in 1964 to 72 per cent in 1972. In other words, the public sector is at present responsible for almost three-fourths of capital formation in Tanzania. This percentage would be even higher if reference is made only to monetary-capital formation.

In reality it was the parastatal enterprises which progressed most, particularly after the Arusha declaration. Starting in 1964, with 6 per cent of total investment, they were taking 35 per cent in 1970 and 49 per cent in 1972. The very high level of 1972 is explained by the fact that TAZARA is included in the parastatal enterprises, and as we have indicated previously, investment made under this project for the construction of the railway was very substantial. This being said, it remains true that the other parastatal enterprises played a key role in the country's economy. In 1972 there were eighty-four parastatal enterprises to be found in all sectors of economic activity (six in agriculture, thirty-four in manufacturing, eighteen in trading, six in transport, eight in financial

1. For more details see Table 12 in the Appendix.

TABLE 44. Trend of the distribution of capital formation by economic growth, 1964–72 (in million shillings)

Type of investment	1964		1966		1968		1970		1972	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
Public sector										
Central government	118	17.5	182	18.4	276	20.9	408	22.5	402	17.5
Local authorities	39	5.8	38	3.8	50	3.8	45	2.5	34	1.5
EAC enterprises	36	5.3	78	7.9	78	5.9	83	4.6	106	4.6
Parastatal enterprises	41	6.1	102	10.3	279	21.2	629	34.6	1 122	48.8
SUBTOTAL	234	34.7	400	40.4	683	51.8	1 165	64.2	1 664	72.4
Private sector										
Private monetary	293	43.5	441	44.5	465	35.2	480	26.4	436	19.0
Private non-monetary	147	21.8	150	15.1	171	13.0	170	9.4	198	8.6
SUBTOTAL	440	65.3	591	59.6	636	48.2	650	35.8	634	27.6
TOTAL	674	100.0	991	100.0	1 319	100.0	1 815	100.0	2 298	100.0

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

institutions and twelve in other sectors). The main results of the operations of the parastatal enterprises in recent years may be summarized as shown in Table 45.

TABLE 45. Main financial results of parastatal enterprise activity (in million shillings)

Item	1966	1968	1969	1970	1971	1972
Receipts	1 281	2 141	2 357	3 367	3 945	4 570
Net operating profit	87	132	162	111	179	171
Capital formation	102	279	153	356	479	460
Employment (number in thousands)	—	34	50	55	63	76
Wage distributed	—	238	282	340	374	414

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

Judged by any standard (the increase in receipt, the capital formation, the employment provided, the wage distributed) the activities of the parastatal enterprises have shown very rapid development. It appears however that the net operating profit has not increased at the same rate as the total receipts, particularly since 1969. The hasty nationalization of certain firms has also given rise to a number of problems either because of the ill-will of private firms or because of the lack of experience of new managers.

With this rapid development of the parastatal enterprises, the importance of the private sector has been declining. While in 1964 it accounted for two-thirds of total investment, in 1972 its share was only around one-quarter.

Foreign trade

Between 1962 and 1972 imports nearly trebled, increasing from 1,127 million shillings to 2,929 million shillings. Exports, however, did not follow the same growth pattern and the deficit of the trade balance has tended to widen. While both exports and imports showed fairly wide fluctuations, it is possible to distinguish three periods during which the trend was quite different.

From 1962 to 1966 imports and exports were on the same rapidly rising curve, with an increase of 11 per cent per annum, and the trade balance was constantly in surplus. From 1966 to 1969 both imports and exports were stabilized and the trade balance was in equilibrium. Since 1969 imports rose sharply while exports increased much less, causing a larger and larger trade deficit.

Breakdown of imports

The rapid increase of imports was accompanied by a change in their composition, and this change is for the good, as can be seen from Table 46, which

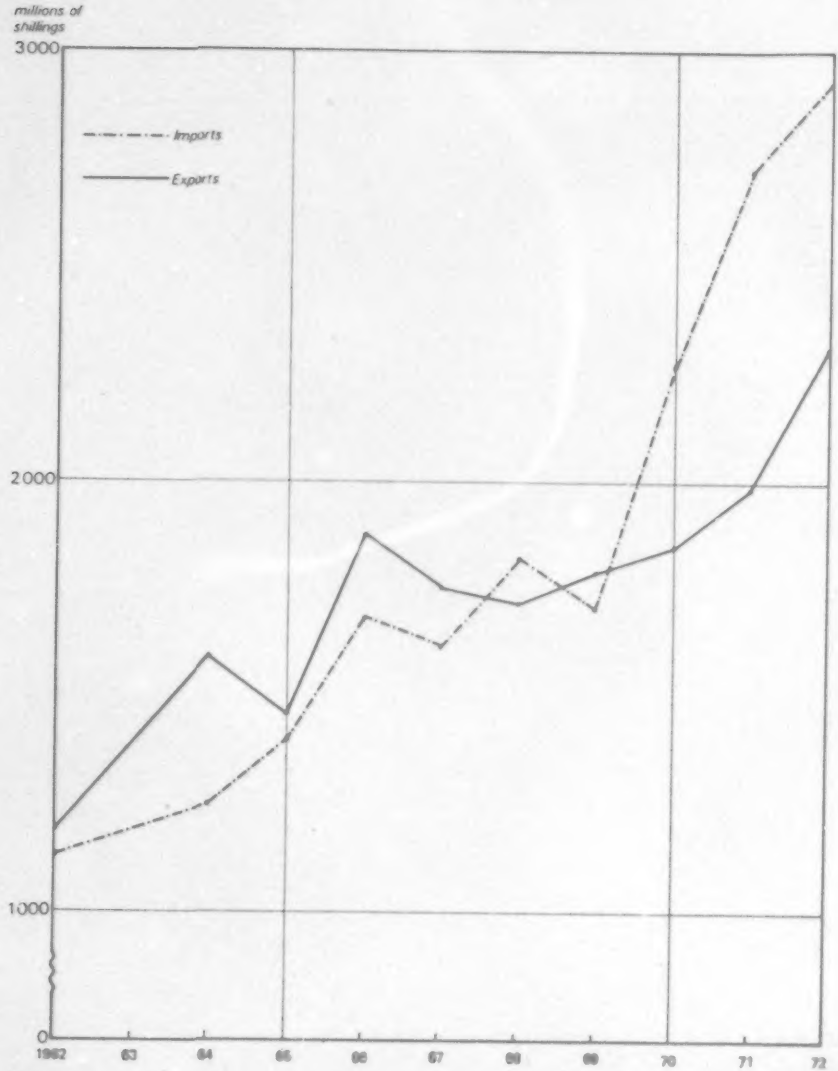

FIGURE 6. Trends of exports and imports, 1962–72.

TABLE 46. Composition of total imports (in million shillings)

Import class	1966		1968		1970		1971		1972	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
Consumer goods	800	47.3	731	39.9	682	30.0	690	25.3	880	30.0
Intermediate goods										
Construction materials	103	6.1	142	7.7	210	9.2	318	11.7	365	12.5
Other	464	27.4	540	29.5	709	31.2	881	32.3	954	32.5
SUBTOTAL	567	33.5	682	37.2	919	40.4	1 199	44.0	1 319	45.0
Capital goods										
Transport equipment	125	7.4	151	8.2	185	8.1	245	9.0	194	6.6
Other equipment	199	11.8	270	14.7	488	21.5	591	21.7	536	18.4
SUBTOTAL	324	19.2	421	22.9	673	29.6	836	30.7	730	25.0
TOTAL imports	1 691	100.0	1 834	100.0	2 274	100.0	2 725	100.0	2 929	100.0
Index	100.0		108.5		134.5		161.1		173.2	

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

gives the detailed trends of the various types of imports. Imports of consumer goods gradually declined in absolute value between 1966 and 1970. Since then they have increased moderately. This increase may be explained partly by the import of Chinese goods, the sale of which helped in financing the local cost of the TAZARA project. In spite of this increase, the share of consumer goods has diminished; while in 1966 consumer goods accounted for nearly half of total imports, in 1972 they amounted to only 30 per cent.

Imports of capital goods, on the other hand, grew quickly as a result of the regular increase in gross fixed-capital formation. This is a witness to the effort Tanzania has made in the field of industrialization and modernization of the country. The same reasons underlie the rapid increase in imports of raw materials and semi-finished products. In spite of the recent industrialization and the beginning of the new local production of certain consumer goods which were previously imported, the economy of Tanzania is still very dependent on imports. Most of the industries of the country are light industries, and certain production industries need to import raw materials from abroad. This is particularly the case for the chemical industries and for the textile industries. Likewise, certain building materials have to be imported. On the whole, the increase in imports is largely the result of the economic development that has taken place, and it may therefore be looked upon as a quite satisfactory feature.

Breakdown of exports

The export trend was much less encouraging (Table 47). Since 1966 the growth of exports was very moderate, as a result of the fall in prices of principal export commodities.

TABLE 47. Export price indices of principal commodities (1960 = 100)

Commodity	1962	1966	1968	1969	1970	1971	1972
Cashew nuts	68.2	121.5	111.9	126.9	130.4	109.5	116.9
Coffee	87.6	103.0	93.8	90.3	121.1	111.5	122.2
Cotton	99.9	90.9	100.7	92.4	91.1	100.0	116.7
Sisal	96.5	80.4	57.2	63.3	56.1	56.8	64.5
Tea	113.5	99.4	99.5	88.7	84.9	82.2	81.7

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

Between 1960 and 1969, prices fell for the country's three main export products: sisal, cotton and coffee. Since then the situation has improved, except for sisal. In the case of cotton and coffee, increased production has largely offset the fall in prices. However, in the case of sisal the fall in prices was so big (more than 40 per cent) that producers have found themselves discouraged and production has declined. Sisal exports, which stood at 437 million shillings in 1964 and accounted for 30 per cent of total exports, fell to 145 million shillings in 1972, i.e. to barely 7.0 per cent.

TABLE 48. Composition of exports, 1962–72 (in million shillings)

Commodity	1962		1964		1966		1968		1970		1972	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
Cashew nuts	47	4.4	66	4.5	100	6.0	107	6.7	115	6.8	150	7.3
Cloves	42	3.9	43	3.0	74	4.4	60	3.8	109	6.5	240	11.6
Coffee	132	12.3	221	15.2	301	18.0	265	16.7	312	18.5	383	18.6
Cotton	148	13.8	198	13.6	350	21.0	283	17.9	247	14.6	336	16.3
Diamond	109	10.1	136	9.3	186	11.2	135	8.5	161	9.5	124	6.0
Petroleum products	—	—	—	—	5	0.3	162	10.2	111	6.6	215	10.4
Sisal	315	29.3	437	30.0	235	14.1	159	10.0	179	10.6	145	7.0
Tea	32	3.0	31	2.1	45	2.7	45	2.8	42	2.5	54	2.6
Tobacco	2	0.2	1	0.1	16	1.0	40	2.6	45	2.7	49	2.4
Other	249	23.1	323	22.2	356	21.3	334	21.1	368	21.9	367	17.8
SUBTOTAL	1 076	100.0	1 456	100.0	1 668	100.0	1 590	100.0	1 689	100.0	2 063	100.0
Exports to East Africa	65		107		98		91		147		133	
Re-export	52		34		112		41		16		116	
TOTAL	1 193		1 597		1 878		1 717		1 852		2 312	

As can be seen from Table 48, the drastic fall in sisal exports has been made up for by increased exports of other products such as cashew nuts, cloves and tobacco. Exports of petroleum products from imported crude oil have also increased encouragingly. This trend, however, will change when Zambia has its own petroleum refineries. The fact remains that Tanzania, in common with other developing countries, is in difficult situation in the field of foreign trade; while prices of manufactured goods and particularly those of capital goods are steadily increasing, prices for exported agricultural products are on a downward trend. It is this deterioration in terms of trade which is at the root of the unfavourable trade balance of the last few years.

The unfavourable export situation has had its effect on the balance of payments, as can be seen from Table 49. Since 1968 the trade balance has constantly been negative, and in spite of the improvement of the balance on services and of the balance on transfer, which have been both favourable, the balance on current account has deteriorated.While it showed a surplus of 226 million shillings in 1964, in 1971 it showed a deficit of 572 million. The following year it improved slightly but the deficit was still sizable, amounting to 374 million shillings. We shall see later on how this deficit was covered by net entry of capital from external sources, and what its effect was on the reserves of foreign exchange of the country.

To round off this brief examination of development in recent years, the following conclusions may be drawn:

1. Although the ambitious targets of the first and second five-year plans have not been entirely achieved, growth of the economy has been relatively high, averaging, in real terms, a rate of 5.5 per cent from 1964 to 1969 and of 5.1 per cent from 1969 to 1972.
2. This growth however has called for a high level of investment, and the share of monetary GDP (at factor costs) devoted to fixed capital formation has been on the increase, going up from 13.8 per cent in 1964 to 34.8 per cent in 1971 and 30.1 per cent in 1972.
3. There has been a steady increase in the part played by the state in the sector of capital formation. At present, either directly or indirectly, through the parastatal enterprises, it is responsible for nearly three-fourths of the amount of investment made.
4. The increase in the amount of investment has caused a rapid increase in imports of capital goods. However, exports have not increased at the same rate, principally because of the fall in prices on world markets, and as a result the trade balance is largely in deficit.
5. Consequently, Tanzania's growth is conditioned by the situation of foreign trade and particularly by the trend of prices of exported primary products. It is also conditioned by the level of foreign aid, since almost all equipment has to come from abroad.

TABLE 49. Trend of the balance of payments, 1964–72 (in million shillings)

Item	1964	1966	1968	1969	1970	1971	1972
Goods							
Exports[1]	1 521.4	1 774.9	1 676.0	1 754.0	1 809.7	1 945.0	2 305.0
Imports[1]	−1 252.1	−1 738.7	−1 890.7	−1 790.1	−2 337.3	−2 787.1	−2 975.2
Trade balance	269.3	36.2	−214.7	−36.1	−527.6	−842.1	−670.2
Services							
Receipt	195.7	296.5	382.8	431.3	593.3	722.0	855.4
Payment	−261.4	−359.4	−361.7	−366.6	−405.9	−517.9	−576.2
Balance on services	−65.7	−62.9	21.1	64.7	187.4	204.1	309.2
Transfer							
Receipt	154.3	125.7	189.4	193.2	265.8	260.3	350.3
Payment	−132.2	−135.0	−112.8	−113.9	−177.1	−193.9	−363.2
Balance on transfer	22.1	−9.3	76.6	79.3	88.7	66.4	−12.9
Balance on current account	225.7	−36.0	−117.0	107.9	−251.5	−571.6	−373.9

1. Because of differences of definitions, the exports and imports figures of the balance of payments are not exactly the same as the figures provided by the customs statistics given earlier.

SOURCE Bank of Tanzania, *Economic and operation reports, June 1969, June 1971, June 1973*, Dar es Salaam.

Prospects for economic development during the present decade

In order to project the economic growth of the country during the present decade, our starting-point will be the targets set by the second five-year plan, covering the period 1969–74. Our assumptions will, however, be slightly less ambitious for two main reasons: first, because our projection period is longer, it is more difficult to maintain a high and steady growth rate during this time, and second, because the growth of the economy during the last few years has been slower than had been projected in the plan.

Before embarking upon the economic projections, it would be of interest to examine in some detail two important problems which are closely connected to the future growth of the economy: financing of fixed-capital formation and trends in the balance of payments.

Financing of capital formation during the second five-year plan

As we have previously shown, because of the concentration of investment in economic infrastructure, which is quite normal at the present stage of development of the country, the growth in capital formation has been much more rapid than the growth of the economy, and the share of monetary GDP devoted to investment has steadily increased. The question may thus be asked whether the financing of investments of such a large size will run into difficulties.

It is true that during the last years of the first five-year plan, and notably in 1967 and 1968, the proportion of GDP taken up by investments was already a large one. The situation at the beginning of the second five-year plan may therefore appear to be only an upward swing in the trends of the previous years. The reason for the high level of investment in the last few years is not to be found in any drop in consumption but rather in the steady widening of the trade-balance deficit as can be seen in Table 50.

Between 1964 and 1970, total consumption fluctuated but little around 83 per cent of total GDP. The proportion of private consumption went down slightly, but this fall was more than offset by an increase in public consumption.

The percentage of gross capital formation during the same period went up from 11.3 per cent to the exceptionally high level of 21.3 per cent. However, this high percentage was achieved only at the cost of a large deficit in the trade balance.[1] In reality, in 1970, gross national savings covered only 78.6 per cent of gross capital formation.

Such a situation, of course, is not abnormal in a country undergoing rapid development, and with investment partly financed through foreign aid. None the less, foreign aid, taking mainly the form of loans plus a rapid increase in the amount of external debt and the servicing of it (repayment of capital and interest) can lead to difficulties. In 1970 for instance, in spite of net capital receipts amounting to 529 million shillings, foreign-exchange reserves fell by 43 million shillings. This figure related to both Zanzibar and mainland Tanzania; it would have been higher if only mainland Tanzania was taken into account.

Bearing in mind the major part played by the state in gross fixed-capital formation, let us try to look more closely at how the state's capital expenditures are financed. According to the second five-year plan, state expenditures for investment purposes, including the subsidy to parastatal enterprises and the contribution to the local cost of TAZARA, should amount to 3,665 million shillings. Table 51 shows the way in which the financing of this amount is planned; it also indicates, for comparison purposes, the actual expenditures of the period 1964–69.

TABLE 51. Financing of government capital expenditures (including the subsidy to parastatal enterprises and the contribution to TAZARA (in million shillings)

Capital expenditures	1964–69		1969–74		Increase coefficient
	Amount	Percentage	Amount	Percentage	
Domestic sources					
Governmental savings	393.4	27.7	620.0	16.9	1.58
Domestic borrowing	466.3	32.8	1 295.0	35.3	2.78
Others	—	—	150.0	4.1	—
SUBTOTAL	859.7	60.5	2 065.0	56.3	2.40
External sources					
Loans	459.8	32.3	—	—	—
Grants	102.6	7.2	—	—	—
SUBTOTAL	562.4	39.5	1 600.0	43.7	2.84
TOTAL	1 422.1	100.0	3 665.0	100.0	2.58

SOURCE 1964–69: United Republic of Tanzania, *Appropriation accounts*. 1969–74: United Republic of Tanzania, *Second five-year plan*, op. cit.

1. As we have previously indicated, in 1964 the trade balance showed a surplus of 280 milion shillings, but in 1970 it showed a deficit of 530 million.

Government capital expenditures, as provided for under the second plan, are two-and-a-half times higher than what was actually spent during the first plan. One of the reasons for this enormous increase is that under the first plan, government capital expenditures were almost exclusively related to development expenditures by the various ministries. In the meantime, government's responsibilities have increased, and both the subsidy to the parastatal enterprises and the contribution to the local cost of the TAZARA project will entail a large increase in capital expenditures.

If we now look at the source of funds, we will see that the proportion of funds coming from abroad should increase from 39.5 to 43.7 per cent. This means that in cash terms these funds must treble. The plan did not explicitly give the distribution between loans and grants, but on the basis of past experience it may be said that the major portion of it (probably nine-tenths) will be in the form of loans.

For the domestic sources of finance, the planners are counting on an increase of government savings from 390 million to 620 million shillings. However, the largest increase will be under the head of domestic borrowing, which is multiplied by a factor of 2.8.

To what extent may we expect the plan's rather ambitious forecasts to be fulfilled? Some idea of the answer can be obtained from comparing the planned figures with the actual government capital expenditures in the last few years, as shown in Table 52.

TABLE 52. Financing of government capital expenditures during the first three years of the second plan (in million shillings)

Capital expenditures	1969/70	1970/71	1971/72	Total, 1969/72	Plan forecasts, 1969/74	Ratio, (4) as percentage of (5)
	(1)	(2)	(3)	(4)	(5)	(6)
Domestic sources						
Governmental savings	50	52	78	180	620	29.0
Borrowing from the banking system	252	314	179	745	630	118.3
Short-term borrowing	125	143	110	378	705	53.6
Others	62	50	21	133	150	88.7
SUBTOTAL	489	559	388	1 436	2 105	68.2
External sources	122	270	351	743	1 600	46.4
TOTAL	611	829	739	2 179	3 705	58.8
External sources as percentage of total expenditures	20.0	32.6	47.5	34.1	43.2	

SOURCE 1969–72: United Republic of Tanzania, *The economic survey, 1972–73*, p. 33. 1969–74: United Republic of Tanzania, *The second five-year plan*, op. cit.

During the first three years of implementation of the plan, government capital expenditures amounted to 58.8 per cent of the forecast figure for the five years. Although the plan's forecasts are made in real terms, while the investments achieved are expressed in terms at current prices, it may nevertheless be said that the amount of the government capital expenditures is roughly in line with what was projected in the plan. However, the proportion of funds from external sources was lower than the plan's assumption. In the period 1969–72 they accounted for only 34.1 per cent of total expenditures whereas the plan expected them to cover 43.2 per cent.

Looking again at financing from domestic sources, we see that the contribution from government savings has been much lower than expected because the growth of recurrent expenditure has been more rapid than that of government revenue. According to the plan, government savings should be almost equal to the amount of loans from the banking system. In fact, government savings came to only 180 million shillings, and a large proportion of investment was financed through loans from the banking system which amounted to 745 million shillings. In other words, after three years of implementation of the plan the amount of loans from the banking system was already 18 per cent more than what had been projected for the five-year period.

It is obvious therefore that the high level of total government capital expenditure has been achieved only at the cost of an increase in public debt. What we have in reality is only an upward swing in past trends. In recent years the internal and external public debt has increased very rapidly from 693 million shillings in 1963 to 2,574 million shillings in 1972.

Movements in the balance of payments during the second five-year plan

Another obstacle which may hamper the increase of investment at the rate set in the plan is the situation of foreign trade, since the greater part of equipment has to come from abroad.

In 1966, Tanzania's exports stood at 1,878 million shillings. They fell in the following years and it was only in 1970 that they more or less climbed back to their 1966 level. Since then, the growth of exports has been encouraging, and it is quite possible that the target set in the plan will be achieved.

Tanzania's exports consist of seven main products: cashew nuts, cloves, coffee, cotton, diamonds, petroleum products and sisal, which accounted for about 77 per cent of total exports in 1972. The price trends of these products on the world market will consequently have a major influence on the level of future export earnings.

The future for two of these products appears to be a poor one. Sisal has fallen in price in the last few years. At present, the situation is improving, but, according to the plan, it is expected that production will fall off. It is further expected in the plan that the production of diamonds will decline. Exports of

these two products will therefore decline even if prices are stabilized at their present level.

Any increase in exports will thus be dependent on the other five products. In 1972 export of cotton has improved owing to the rise in prices caused by a decline in world production. However, this favourable trend is being reversed. It is difficult to know what may be the long-term prospects, although the probable increase in prices of synthetic textiles, resulting from the oil situation, may improve the cotton export situation.

So far as coffee is concerned, the latest international agreement has given Tanzania a quota of 41,000 metric tons a year. Annual coffee production, by the end of the plan, will probably stand at 67,000 metric tons, and consequently one-third of coffee exports will have be made outside the quota. Prospects on the world market have been good in the last few years and the difference between the price of coffee sold outside the quota, and the price for coffee sold under the quota, has narrowed. At the same time, prices have been rising. It does not look as though this situation will continue, however.

Prospects have also been good for cashew nuts and for cloves. In general, it may be said that the situation of agricultural exports of Tanzania has considerably improved at the beginning of the decade as compared to what it was at the end of the preceding one.

Production of petroleum products has increased rapidly in the recent past and it has been possible to export part of this production since 1967. At present, however, production is based on the importation of crude oil, and the effect of any increase in the exports of petroleum products on the trade balance is marginally or completely offset by the need to import an equivalent quantity of the raw product. In addition, petroleum products are mainly exported to Zambia, which is now building its own petroleum refinery. It may thus be expected that exports will decline in the future.

When we come to examine imports (see Table 53), a distinction has to be made between consumer goods, capital goods and raw materials. It was stipulated in the plan that imports of consumer goods should be stabilized at 750 million shillings. In fact, from 1966 to 1969 imports of consumer goods tended to decrease; they then became stabilized, but increased sharply after a period for reasons we have already discussed.

TABLE 53. Imports of consumer goods and monetary GDP (in million shillings)

Item	1966	1967	1968	1969	1970	1971	1972
Consumer goods imports	800	578	731	642	682	690	880
Monetary GDP	4 464	4 688	4 991	5 325	5 869	6 273	6 973
Consumer goods imports as a percentage of monetary GDP	17.9	12.3	14.6	12.0	11.6	11.0	12.6

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

Disregarding 1972, which appears to be an exceptional year, the proportion of imports of consumer goods in monetary GDP has regularly diminished. This relative decrease of imports of consumer goods was due to the expansion of domestic industry during the years of the first plan which made it possible to replace by local production, to a certain extent, products hitherto imported. There was a particularly large fall in imports of clothing, footwear and furnishings (see Table 54).

TABLE 54. Percentage share of private consumption expenditure met out of imports

Type of expenditure	1964	1966	1968	1970
Clothing	41.9	38.0	33.1	23.2
Entertainment and education	32.4	30.3	29.6	29.1
Food, beverages and tobacco	6.9	6.1	4.8	5.2
Footwear	64.4	47.8	36.2	25.2
Fuel and power	9.7	7.0	6.5	8.7
Furnishings	31.0	26.4	19.8	18.3
Health expenses	24.3	27.1	29.8	31.2
Transport	23.8	22.8	24.1	20.6
Other	20.7	24.1	21.7	23.8
All expenditures	15.5	14.4	12.5	11.4

SOURCE United Republic of Tanzania, *National accounts, 1964–1970*, op. cit.

If this trend in the gradual substitution of imported consumer goods by local products continues, the target set by the plan may be achieved. However, the situation is quite different concerning the import of capital goods and intermediate products. The data of the last few years show that the projections made in the plan were rather optimistic. The accelerated capital formation at the beginning of the second five-year plan has caused an increase in imports of capital goods and intermediate goods at a rate much higher than what was expected by the plan (Table 55).

TABLE 55. Actual and projected amounts of imports (in million shillings)

Year	Capital goods and intermediate products			Total imports		
	Actual imports	Second Plan projection[1]	Differences	Actual imports	Second Plan projection[1]	Differences
1969	1 068	1 181	−113	1 710	1 931	−221
1970	1 592	1 324	+268	2 274	2 074	+200
1971	2 035	1 484	+551	2 725	2 234	+491
1972	2 049	1 645	+404	2 929	2 395	+534

1. The figures have been adjusted to take into account the fact that the plan refers to the fiscal year instead of the calendar year.

If in 1969 the amount of imports of capital goods and of intermediate products was below the estimate given in the plan, it grew very rapidly during the following year. As a result, total imports were much higher than the figures projected in the plan. In 1972 they reached 2,929 million shillings, i.e. 22.3 per cent more than the plan forecast. From the trends of exports and imports observed during the last few years, it may be concluded that if gross capital formation is to take place at the rate laid down in the plan, the deficit of the trade balance will tend to increase, and will be much higher than that estimated by the planners. To give a more complete picture let us try to compare the actual results of the balance of payments with the figure projected by the second five-year plan. This is done in Table 56, which gives both the actual figures for the 1967/72 period and the projections made by the plan.

When the second plan was being drawn up the final data concerning the 1968 balance of payments were not yet available. The projections were therefore based on figures for 1967 and for previous years. But in 1968 itself there were some important changes in the trends. The trade balance, which up to then had been in surplus, began to show a deficit. On the other hand, the balance on services was favourable for the first time, thanks to the increasing traffic to and from Zambia, and to the expansion of the tourist trade. These changes in the trends were not temporary, as can be seen from the figures in Table 56.

Even if we take into account the encouraging trends of the balance on services which, instead of the deficit foreseen in the plan, showed an increase in surplus of 21 million shillings in 1968 and 309 million shillings in 1972, the fact remains that the deficit of the balance on current account is widening because of a growth in imports much more rapid than that of exports. This deficit of the balance on the current account created difficult problems in 1970 when foreign exchange reserves began to run down. The situation improved very much during the two following years in spite of a sizable trade-balance deficit. However, this was due to a very large inflow of foreign capital which amounted to close on 1,600 million shillings, both in 1971 and in 1972. It is also to be noted that in the last few years the outflow of capital and the amount of 'errors and omissions' have been abnormally high. This was mainly due to the illegal export of private capital and unrecorded imports from neighbouring countries (especially from Kenya). These unrecorded exports and imports were facilitated by the free movement of currency between the partners of the East African Community. That is why in March 1971 exchange control was introduced, and responsibility for import control was transferred to the Bank of Tanzania, which took positive action to allocate foreign exchange to each category of import items in a manner consistent with public demand and national priorities.

From the above analysis, it can clearly be seen that the inflow of foreign capital plays a very important role in the development of the Tanzanian economy. This inflow of foreign capital has increased at a very high rate in the last few years, as can be seen in Table 57, and has contributed, to a large extent, to the high level of capital formation of the country.

TABLE 56. Balance of payments: actual and planned figures (in million shillings)

Item	1967	1968	1969
Goods			
Exports	1 760	1 718	1 793
Imports	−1 625	−1 834	−1 710
Adjustment	−143	−99	−119
Trade balance	−8	−215	−36
Services			
Earnings	328	383	472
Payments	−350	−362	−367
Balance on services	−22	21	105
Net transfers	69	77	61
BALANCE ON CURRENT ACCOUNT	39	−117	130
Capital			
Inflow	—	87	270
Outflow	—	−39	−118
BALANCE ON CAPITAL ACCOUNT	159	48	152
Errors and omissions	−82	154	−125
Balance on ordinary transactions	114	85	157
Special transactions	−8	7	6
NET CHANGE IN FOREIGN EXCHANGE	106	92	163

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

The government has received a large share of this inflow, particularly with respect to the TAZARA project, but the parastatal enterprises have also benefited from it a great deal. Needless to say, success in the implementation of the plan will largely depend on Tanzania's possibilities of mobilizing large amounts of foreign capital. At present, the quantity of capital aid available to Tanzania does not appear to be out of line with the country's requirements.

Tanzania receives development aid from a large number of donors, and most of this aid is provided on very favourable terms. Supplier credits have been kept to a minimum. In view of Tanzania's commitment to development and its generally favourable development performance, it may be expected that foreign aid will continue to increase. The external-debt service burden is currently around 8 per cent of the country's exports and should remain within manageable proportions for the foreseeable future provided that foreign loans continue to be made on concessionary terms.

It is also to be added that Tanzania will need more aid of a different kind. Up to now capital aid has been linked to the procurement of imported equip-

1970	1971	1972	Plan projections 1969/70	Plan projections 1973/74
1 851	1 989	2 313	1 982	2 467
−2 274	−2 726	−2 929	−1 997	−2 640
−105	−105	−54	−63	−76
−528	−842	−670	−78	−249
593	722	885	332	458
−406	−518	−576	−369	−550
187	204	309	−37	−92
89	66	−13	—	—
−252	−572	−374	−115	−541
679	1 599	1 388	—	—
−150	−741	−477	—	—
529	858	1 111	273	406
−360	−207	−274	—	—
−83	79	463	158	65
40	64	41	—	—
−43	143	507	158	65

ment and materials for large infrastructural and industrial projects. This type of aid will continue to be required, but it is expected that Tanzania will require a growing proportion of aid for smaller agricultural and rural development projects which may have less appeal for foreign donors, but which are nevertheless very important for the development of the country.

Economic growth during the 1970s

Bearing in mind the problems we have previously referred to, i.e. the financing of the considerable amount of investment called for under the second plan and the foreseeable consequences for the balance of payments, we have assumed, in our projections, rates of growth that are slightly lower than those fixed in the plan. In spite of this reduction in growth rate, the effort required for the development of productive investment will still be sizable, and the financing of the investment involved implies a high level of net capital inflow during

TABLE 50. GDP and its appropriation (in million shillings)

Item	1964		1965		1966		1967		1968		1969		1970	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
Consumption														
Public consumption	588	9.8	642	10.5	725	10.3	803	10.9	884	11.2	997	11.9	1 181	12.9
Private consumption	4 363	72.3	4 458	72.6	5 284	75.0	5 238	70.7	5 789	73.3	5 938	71.0	6 363	69.5
SUBTOTAL	4 951	82.1	5 100	83.1	6 009	85.3	6 041	81.6	6 673	84.5	6 935	82.9	7 544	82.4
Investment														
Public investment	234	4.0	252	4.1	400	5.7	642	8.7	683	8.6	601	7.2	1 291	14.1
Private investment	440	7.3	537	8.8	591	8.4	629	8.5	635	8.1	616	7.4	656	7.2
SUBTOTAL	674	11.3	789	12.9	991	14.1	1 271	17.2	1 318	16.7	1 217	14.6	1 947	21.3
Change in inventories	93	1.5	107	1.7	111	1.6	80	1.1	94	1.2	90	1.1	100	1.1
Exports-imports	280	4.6	56	0.9	110	1.6	21	0.3	−196	−2.5	−50	−0.6	−530	−5.8
Errors or omissions	32	0.5	88	1.4	−175	−2.5	−13	−0.2	8	0.1	173	2.0	92	1.0
TOTAL (AT MARKET PRICES)	6 030	100.0	6 140	100.0	7 046	100.0	7 400	100.0	7 897	100.0	8 365	100.0	9 153	100.0

SOURCE United Republic of Tanzania, *National accounts 1964–1970*, op. cit.

TABLE 57. Balance on capital account, 1968–72 (in million shillings)

Item	1968	1969	1970	1971	1972
Inflow					
Government					
TAZARA project	—	—	291.6	620.7	675.9
Other projects	87.0	148.0	221.8	324.6	300.0
SUBTOTAL	87.0	148.0	513.4	945.3	975.9
Parastatals	—	93.7	152.0	224.8	197.2
Private loans	—	28.6	12.8	39.9	46.1
Other	—	—	—	389.2	368.7
TOTAL INFLOW	87.0	270.3	678.2	1 599.2	1 587.9
Outflow					
Government	−17.9	−9.8	−10.6	−44.3	−45.6
Parastatals	—	−35.3	−81.2	−119.3	−92.7
Private loans	—	−11.7	−13.4	−26.4	−58.1
Other	—	—	—	−502.5	−240.6
TOTAL OUTFLOW	−17.9	−56.8	−105.2	−692.5	−437.0
Compensation payments	−21.2	−61.7	−44.6	−48.7	−40.4
BALANCE ON CAPITAL ACCOUNT	47.9	151.8	528.4	858.0	1 110.5

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

the whole period. The rate of growth forecast in the second plan is 6.5 per cent per annum, 7.6 per cent for the monetary sector and 3 per cent for the subsistence sector. In our projection for the period 1971–80 the overall rate is 5.7 per cent, i.e. 6.7 per cent for the monetary sector and 2.8 per cent for the subsistence sector.[1]

The detailed assumptions of growth rates for the various economic sectors are given in Table 58, which indicates also, for comparison purposes, the rate of growth achieved during the first five-year-plan period, the targets set in the second five-year plan and actual growth during the last few years.

In the agricultural sector we have assumed a rate of growth lower than that fixed in the second plan. As we have seen, in the last few years the terms of trade have been relatively unfavourable for most of the products concerned. At present the prospects for coffee, cashew nuts and cotton still seem to be good, but this may not be the case in the future.

TABLE 58. Achieved and projected growth rates of the various economic sectors

Sector	Achieved during the 1964–69 period	Projected in the 1969–74 plan	Achieved during the 1969–72 period	Assumed in our projections
	%	%	%	%
Agriculture				
Subsistence sector	2.9	3.0	3.0	2.8
Monetary sector	3.7	7.2	2.7	4.5
Both sectors	3.3	5.1	2.9	
Mining and quarrying	0.9	−2.5	−2.6	1.0
Manufacturing and handicrafts	11.8	13.0	6.6	9.0
Electricity and water supply	9.9	10.0	11.0	9.5
Construction				
Subsistence sector	2.8	—	2.9	2.8
Monetary sector	10.9	—	8.8	8.5
Both sectors	9.1	12.0	7.8	
Trade and tourism	7.8	8.0	4.7	6.0
Transport and communications	10.7	9.0	9.5	9.0
Finance, insurance and real estate				
Subsistence sector	2.8	—	2.8	2.8
Monetary sector	8.1	—	0.4	6.0
Both sectors	4.0	6.0	2.3	
Administration	4.4	5.0	9.8	6.0
ALL SECTORS	5.5	6.5	5.0	5.7
Subsistence sector	2.9	3.0	3.2	2.8
Monetary sector	6.7	7.6	5.8	6.7

SOURCE Computed from data provided in: United Republic of Tanzania, *The economic survey, 1972–73.*

1. These rates are very much the same as those, at constant prices, achieved during the first five-year-plan period (1964–69) and during the last few years (1969–72).

It was estimated in the plan that there would be annual decline in output of 2.5 per cent for the mining sector because of the foreseable reduction of diamond and gold production resulting from the gradual working out of the mines. However, investigation of the large coal and iron-ore deposits in the extreme south-west of the country has indicated that the coal is cokable. It has also been established that the vanadium content of the iron ore is probably of more value than the iron itself. In addition, there are plans to expand the production of other minerals such as tin, salt, magnesite, black sands and various gemstones. Taking these various possibilities into consideration, we have assumed a change in the trend of production.

In the indutrial sector (manufacturing, electricity/water supply and building) the rates assumed by us are also lower than those in the plan. The main reason is that, while expansion in the industrial sector has been rapid during the first five-year-plan period because the starting level was a rather low one, this may not be the case in the future. In fact, during the last few years, the growth of this sector has slowed down. With a few exceptions, there is a surplus capacity in most new factories. With the expansion of the production of current consumption goods (brewing, food products, cigarettes, textiles, sawmill production)

TABLE 59. Projection of GDP, 1971–80 (in million shillings)

Sector	1971		1980	
	Amount	Percentage	Amount	Percentage
Agriculture				
Subsistence sector	1 905	21.5	2 442	16.8
Monetary sector	1 589	18.0	2 361	16.3
SUBTOTAL	3 494	39.5	4 803	33.1
Mining and quarrying	121	1.4	132	0.9
Manufacturing and handicrafts	893	10.1	1 940	13.4
Electricity and water supply	91	1.0	206	1.4
Construction				
Subsistence sector	67	0.8	86	0.6
Monetary sector	414	4.6	863	5.9
SUBTOTAL	481	5.4	949	6.5
Trade and tourism	1 170	13.2	1 976	13.6
Transport and communications	788	8.9	1 712	11.8
Finance, insurance and real estate				
Subsistence sector	601	6.8	770	5.3
Monetary sector	189	2.1	319	2.2
SUBTOTAL	790	8.9	1 089	7.5
Administration	1 018	11.6	1 719	11.8
TOTAL	8 846	100.0	14 526	100.0
Subsistence sector	2 573	29.1	3 298	22.7
Monetary sector	6 273	70.9	11 228	77.3

SOURCE 1971: United Republic of Tanzania, *The economic survey, 1972–73*. 1980: IIEP projection.

the potential local demand will gradually be met, and further increase in production may turn out to be more difficult.

The problem for Tanzania is that industrial development should be adapted to the small size of the monetized market, particularly when the tendency is for partner states in the East African Community to duplicate industries, rather than to specialize in order to benefit from the larger, combined market.

The growth rate for the service sector, closely dependent as it is on the level of production in industry and agriculture, has also been reduced, in relation to the assumptions for the industrial and agricultural sectors. On the basis of the previous sets of assumptions, the growth of GDP may be projected as shown in Table 59.

In spite of the assumed reduction in the growth rates, relative to what has been forecast by the plan, the level of investment required is still a high one. It may be estimated that gross capital formation will have to go up from 1,947 million shillings in 1970 to 3,100 million shillings in 1980. An assessment of the allocation of resources is shown in Table 60.

TABLE 60. Appropriation of GDP at market prices (in million shillings)

Resource allocation	1970		1980	
	Amount	Percentage	Amount	Percentage
Public consumption	1 181	12.9	2 250	14.0
Private consumption	6 455	70.5	11 100	68.9
Gross fixed capital formation				
Government and local authorities	531	5.8	950	5.9
Parastatal enterprises	640	7.0	1 200	7.5
EAC enterprises	120	1.3	200	1.2
Private enterprises	656	7.2	750	4.7
SUBTOTAL	1 947	21.3	3 100	19.3
Change in inventories	100	1.1		
Exports minus imports	−530	−5.8	−350	−2.2
TOTAL GDP (AT MARKET PRICE)	9 153	100.0	16 100	100.0

SOURCE 1970: United Republic of Tanzania, *National accounts 1964–70*, op. cit. 1980: IIEP projections.

After this brief review of past economic growth and of prospects for the present decade, which will help in assessing the ressources available for education, let us now try to see how the future development of education, and the increase in expenditure which it implies, may be financed from public sources.

Public revenue and educational expenditures

Here again it would be of interest to analyse past trends before looking at the prospects for the near future.

Government revenue

Increase in government recurrent revenue in recent years

Government recurrent revenue has increased at a very rapid rate in recent years (Table 61). It went up from 705 million shillings in 1963/64 to 1,860 million shillings in 1971/72, i.e. at a growth rate of 13 per cent per annum at current prices. If the rise in prices is taken into account the real rate of increase may be of the order of 10 per cent.

This increase in revenue is due, of course, to economic growth, and to the introduction of new taxes (such as the development levy in 1966, the transfer tax in 1968, and the sales tax in 1969), to increases in tax rates and, last but not least, to improvements in the collection of taxes. Thanks to this fiscal effort, government revenue, as a percentage of monetary GDP, increased from 18.5 per cent in 1963/64 to 28.2 per cent in 1969/70. Since the latter date, however, the percentage has levelled off. It is true that the tax burden was already very high and it seems difficult to increase the fiscal pressure any further.

DIRECT TAXES

Direct taxes constitue about one-quarter of total revenue. Income tax, which applies both to persons and to companies, has made up by far the greater part. The development of this tax over the period is rather exceptional in character, and the calculation of an elasticity coefficient for it in relation to the growth of monetary GDP would appear to be of comparatively little significance.[1]

1. For more details see Table 15 in the Appendix.

TABLE 61. Trends of public revenue, 1963-72 (in million shillings)

Revenue	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72
Income tax	120.4	130.8	153.9	158.6	170.0	251.6	254.7	301.6	396.2
Other direct taxes	20.3	21.3	69.6	74.2	83.7	87.0	97.3	140.8	135.8
SUBTOTAL	140.7	152.1	223.5	232.8	263.7	338.6	352.0	442.4	532.0
Customs duties	208.2	245.3	259.7	296.6	344.9	368.6	343.9	366.8	321.4
Export duties	18.1	29.1	12.3	37.9	35.5	53.0	47.4	54.9	44.5
Excise taxes	77.9	91.1	100.1	121.8	143.6	161.6	173.9	188.5	241.6
Sales tax	—	—	—	—	—	—	196.3	217.4	218.6
Motor vehicle tax	12.4	21.0	21.4	25.4	25.5	27.8	39.7	44.0	36.5
Other indirect taxes	12.8	13.9	20.0	25.1	39.4	49.8	25.9	50.3	36.0
SUBTOTAL	329.4	400.4	413.5	506.8	588.9	660.8	827.1	921.9	898.6
Income from property	54.1	84.9	70.6	73.2	107.9	92.9	116.2	111.9	131.9
Sales of goods and services	15.9	17.4	27.7	30.6	35.1	42.2	46.1	50.6	88.2
Other revenues	155.0	181.7	209.0	180.6	132.9	135.3	235.5	156.7	208.5
TOTAL REVENUE	705.1	836.5	944.3	1 024.0	1 128.5	1 269.8	1 576.9	1 683.1	1 859.2
Monetary GDP	3 813	3 835	4 154	4 575	4 840	5 163	5 607	6 071	6 624
Revenue as percentage of monetary GDP	18.5	21.8	22.7	22.4	23.3	24.6	28.1	27.7	28.1

SOURCE United Republic of Tanzania, *Appropriation accounts*.

From 1962 to 1968, the increase in income tax kept in line with that of GDP and, in percentage terms, amounted to 3.5 per cent of monetary GDP. From 1968 onwards, its rate of growth increased markedly, and revenue from income tax rose to 6 per cent of GDP in 1972. This growth would seem to be due partly to an increase in income, and partly to an improvement in the collection of income tax.

The two other direct taxes are the personal tax and the development levy introduced in 1966. Collection of these taxes was combined in 1968. Their growth appears to be rather irregular.

INDIRECT TAXES

The three traditional indirect taxes are customs duties, export taxes and excise taxes. In 1969 a sales tax was added. Customs duties have not increased at the same rate as imports. Since 1968 they have tended to decrease. This is mainly due to recent changes in the pattern of imports. For obvious reasons, customs duties are lower for equipment than for consumer goods, and as we have noted there has been some substitution of imported consumer goods by local products (notably textiles, cigarettes, beverages). This trend will certainly continue and may lead to a relative reduction of revenue derived from customs duties. It is precisely in view of this foreseeable reduction that the government decided to introduce a sales tax.

Export taxes constitute a fairly small part of indirect taxes. Since 1968, they have also tended to decrease as a result of the fall-off in prices of exports. Coffee, cotton and cashew nuts are the three main products subject to export tax, and account at present for roughly 90 per cent of the revenue from this source.[1] The increase in revenue from this tax will, therefore, depend on the position of the products on the international market, from the point of view both of the quantities exportable, and of prices. A fall in prices could lead to change in the rate of taxation.

The revenue coming from the excise tax has grown quickly. Its elasticity coefficient in relation to monetary GDP has been fairly high since 1965. This high elasticity coefficient is in particular the result of the development of the industrial sector and the gradual replacement of imported products by local products. It should be noted, however, that a new tax was introduced in 1969, after the product concerned has been subjected to either customs duty or excise tax. In view of this new tax and of its direct effects on prices, it is unlikely that the rate of exise tax can still be further increased in the future, so that its elasticity coefficient in relation to the monetary GDP will no doubt tend to decrease.

1. For more details see Table 14 in the Appendix.

NON-FISCAL REVENUES

The non-fiscal revenues include, on the one hand, income from government property and, on the other, certain miscellaneous revenues. Government property includes the forests and mines, and while income from forestry may continue to increase in the future, the same may not be true for the mines. It may be expected, in particular, that royalties from diamond mining will tend to decrease.

As far as miscellaneous revenues are concerned, these range from sales of goods and services to interest and dividends from government assets. On the whole the non-fiscal revenues amounted to a sizable proportion of total rvenue.

Projection of government recurrent revenue over the present decade

On the basis of the trend of the various forms of government revenue previously analysed, we have attempted to project this revenue into the future. We have based our projection on the government revenue of 1971/72, which is the last year for which data on actual revenues and expenditures are available. For more recent years only budget estimates can be obtained.

For the direct taxes we have adopted an elasticity coefficient, in relation to monetary GDP, of 1.4 per cent for the income tax and 1.2 per cent for the other direct taxes.

With regard to indirect taxes, it has been assumed that customs duties will increase at a slightly lower rate than exports because of the change in the pattern of imports (fewer consumer goods and more capital goods and raw materials). The same assumption has been made for export tax because of the price trends on the world market for the three main products subjected to this export tax. Let us recall that the revenue coming from both customs duties and export taxes has tended to decrease since 1968.

The excise tax has been assumed to increase at a faster rate than monetary GDP, and the sales tax at the same rate. As we have indicated, the sales tax is additional to customs duties and to excise tax, and its rate is uniform.

On the basis of this set of assumptions, public revenues in 1979/80 have been projected as shown in Table 62. As can be expected, the share of direct taxes will substantially increase. In 1979/80 they will represent one-third of government revenue.

The annual rate of growth of government revenue, according to the projection just given, is 7.5 per cent, whilst that of monetary GDP is 6.7 per cent and that of total GDP 5.7 per cent. It has been assumed, in other words, that the burden of taxation will increase in the future. The recurrent revenue of the government as a proportion of monetary GDP will increase, in fact from 28 per cent in 1971/72 to 30 per cent in 1979/80.

TABLE 62. Projection of government recurrent revenue, 1972–80 (in million shillings)

Revenue	1971/72 Amount	1971/72 Percentage	Assumed rate of growth, 1971–80 (percentage)	1979/80 Amount	1979/80 Percentage
Direct taxes					
Income tax	396.2	21.3	9.5	818.9	24.7
Other	135.8	7.3	8.0	251.2	7.6
SUBTOTAL	532.0	28.6	9.1	1 070.1	32.3
Indirect taxes					
Custom duties	321.4	17.3	5.0	474.7	14.3
Export duties	44.5	2.4	3.0	56.4	1.7
Excise tax	241.6	13.0	8.5	464.1	14.0
Sales tax	218.6	11.8	6.7	367.2	11.1
Other indirect taxes	72.5	3.9	6.7	121.8	3.7
SUBTOTAL	898.6	48.4	6.5	1 484.2	44.8
Non-fiscal revenue					
Income from property and sales of goods and services	220.1	11.8	8.0	407.4	12.3
Miscellaneous revenue	208.5	11.2	6.7	350.3	10.6
SUBTOTAL	428.6	23.0	7.4	757.7	22.9
TOTAL	1 859.2	100.0	7.5	3 312.0	100.0

SOURCE IIEP projection.

Projections of government expenditures

Capital expenditure will be projected first since it is closely linked to the rate of growth of the economy. The development of recurrent expenditure will then be dealt with.

Capital expenditure

The rate of growth of government capital expenditure has been very high in recent years. From 1964 to 1971, government capital expenditures, including transfer to parastatal enterprises, have increased fivefold. The distribution of expenditures by sector was as shown in Table 63.

Investment in the economic infrastructure has increased at a very rapid rate. By comparison investment in land improvement appears to be rather modest. Since 1969, the transfer to parastatals went up tremendously and at present

TABLE 63. Distribution of government expenditure by sector over the period 1964–71 (in million shillings)

Sector	1964/65	1966/67	1968/69	1969/70	1970/71
Fixed capital formation					
Land improvement	4.0	6.9	6.2	23.5	27.5
Residential building	3.0	7.5	4.1	10.7	21.2
Non-residential building	50.0	44.6	53.6	68.2	181.0
Public works	62.3	117.3	225.2	225.1	304.7
Transport equipment	10.2	10.1	19.6	12.9	23.1
Other equipment	11.9	21.2	20.9	42.1	31.8
SUBTOTAL	141.4	207.6	329.6	382.5	589.3
Capital transfer					
Transfer to parastatals	20.3	18.5	40.1	147.3	270.9
Transfer to local authority	—	—	20.0	20.0	23.8
Other capital transfers	21.2	14.1	10.0	8.1	15.5
SUBTOTAL	41.5	32.6	70.1	175.4	310.2
Other capital expenditures	21.0	54.2	60.5	52.6	93.5
TOTAL	203.9	294.4	460.5	610.5	993.0

SOURCE United Republic of Tanzania, *National accounts, 1964–1970*, op. cit.

accounts for more than one-fourth of government capital expenditure. Details as to the financing are shown in Table 64 overleaf.

The financing pattern of public capital expenditure has changed to a large extent during the 1964–70 period. In general, the proportion of domestic sources has tended to increase. In these domestic sources, however, the share of public saving has decreased regularly from 29.6 per cent in 1964/65 to only 3.1 per cent in 1970/71. In the same way, external grants decreased from 19.5 per cent to 2.2 per cent over the same period. In fact, the financing requirement created by heavy development spending has been met either by long-term borrowing (both domestic and external) or by short-term borrowing. In 1970/71, for instance, out of the 320 million shillings put under the heading 'other domestic sources', 228 million in reality consisted of short-term borrowing provided by the central bank by way of direct advances or treasury-bill holdings. The important role played by domestic and foreign loans has led to a rapid increase in the national debt (see Table 65).

The annual rate of increase from 1966 to 1972 was 18.3 per cent. It is obvious that such a rate of increase cannot be maintained in the future, because of the growing burden of the national debt. The servicing of that debt has already absorbed a large and increasing share of public revenue, as is shown in Table 66.

TABLE 64. Financing of public capital expenditures, 1964–71

Amount and percentage distribution	1964/65	1966/67	1968/69	1969/70	1970/71
Absolute amounts (in million shillings)					
Public saving	60.4	42.1	83.8	50.2	30.8
Domestic borrowing	16.3	78.7	132.5	230.7	323.0
Other domestic sources[1]	48.6	46.3	121.4	207.7	319.6
External loans	59.1	116.4	122.7	121.5	317.4
External grants	19.5	10.9	0.1	0.4	2.2
TOTAL	203.9	294.4	460.5	610.5	993.0
Percentage distribution					
Domestic sources					
Public saving	29.6	14.3	18.2	8.2	3.1
Domestic borrowing	8.0	26.7	28.8	37.8	32.5
Other domestic sources[1]	23.9	15.8	26.4	34.0	32.2
TOTAL	61.4	56.8	73.4	80.0	67.8
External sources					
External loans	29.0	39.5	26.6	19.9	32.0
External grants	9.6	3.7	—	0.1	0.2
TOTAL	100.0	100.0	100.0	100.0	100.0

1. Mainly short-term borrowing.

SOURCE United Republic of Tanzania, *National accounts 1964–1970*, op. cit.

TABLE 65. Trends in the national debt, 1966–72 (in million shillings)

Debt	1966	1967	1968	1969	1970	1971	1972
Internal debt	261.6	335.9	455.5	588.6	819.9	1 021.0	1 099.1
External debt	679.4	802.9	707.7	881.7	1 015.8	1 410.9	1 475.2
TOTAL	941.0	1 138.8	1 163.2	1 470.3	1 835.7	2 431.9	2 574.3

SOURCE United Republic of Tanzania, *The economic survey, 1971–72.*

TABLE 66. Servicing of national debt and recurrent revenue, 1963–72 (in million shillings)

Year	Servicing of national debt (1)	Recurrent government revenue (2)	Column (1) as a percentage of column (2)	Year	Servicing of national debt (1)	Recurrent government revenue (2)	Column (1) as a percentage of column (2)
1963–64	47.4	705.1	6.7	1968–69	112.8	1 269.8	8.9
1964–65	53.4	836.5	6.4	1969–70	176.3	1 576.9	11.2
1965–66	70.3	944.4	7.4	1970–71	167.6	1 654.2	10.1
1966–67	98.5	1 024.0	9.6	1971–72	238.8	1 859.2	12.8
1967–68	142.3	1 129.5	12.6				

SOURCE United Republic of Tanzania, *Appropriation accounts.*

We have previously tried to estimate the amount of government capital expenditure on the basis of the assumptions made about the potential for economic growth during the present decade. The pattern of financing of public investment has two important consequences which must be taken into account in the projection of recurrent expenditure. On the one hand, if public savings are to cover one-third of ministries' development expenditures (excluding the transfer to parastatal enterprises), recurrent revenue, as previously projected, must show a surplus over recurrent expenditures of about 300 million shillings. Even in this case, the proportion contributed by loans will continue to be large over the period 1972–80, so that the national debt will increase still further. A corresponding increase in the cost of servicing of the national debt must therefore be expected. In other words, the need to mobilize public savings, and the increase in the cost of debt servicing, will absorb a large part of the revenue. Only the remainder will be available for financing government recurrent expenditures.

Recurrent expenditures

TRENDS OF RECURRENT EXPENDITURES IN RECENT YEARS

Expenditures are classified in Tanzanian appropriation accounts and budgets not by function but by ministry. In Table 67 the various ministries have therefore been regrouped, for the sake of clarity of presentation, in terms of their major functions, although it is realized that such a regrouping may to some extent be arbitrary in character.

During the period 1964–72, total recurrent expenditures increased at an annual rate of 12.6 per cent. The cost of national-debt servicing has increased most rapidly over the period, namely at a rate of 24 per cent per annum. The corresponding proportion of the recurrent expenditures has thus increased from 6.9 per cent to 13.4 per cent. This problem has already been mentioned and it has been shown that the financing of government capital expenditure, which is effected largely by means of loans, whether domestic or foreign, has led to a rapid increase in the national debt in the past.

Expenditure on education has also increased very rapidly, at an average of 17.7 per cent per annum, and its share of total expenditure has risen from 15.4 per cent to 21.0 per cent. If expenditure related to the servicing of the national debt and to pensions is excluded so as to take into account only expenditures by other ministries, the share taken up by education is larger, rising from 17.4 per cent to 24.8 per cent.

The growth in educational expenditure is matched only by that of social expenditures, including health. By comparison the growth in expenditure for administration and economic services appears to be modest. It is true that for economic services, the level of capital expenditure is more significant than that of recurrent expenditure.

TABLE 67. Distribution of recurrent expenditure by major sector of government activities (in million shillings)

	1964/65	1966/67	1968/69	1969/70	1970/71	1971/72	Rate of growth, 1964-72
National debt and pensions							
National debt	53.4	98.5	112.8	176.3	167.6	238.8	24.0
Pensions	27.4	28.4	29.2	30.0	29.7	33.7	3.0
SUBTOTAL	80.8	126.9	142.0	206.3	197.3	272.5	
Administration and defence							
General administration	—	—	—	257.7	282.5	249.7	
Public order and safety	—	—	—	141.0	150.3	154.9	
Defence	—	—	—	81.2	98.8	136.3	
SUBTOTAL	312.4	389.2	400.0	479.9	531.6	540.9	8.2
Education	119.4	145.5	203.0	255.7	313.7	374.4	17.7
Social services							
Health				105.8	132.6	149.7	
Housing and other				73.7	82.3	71.9	
SUBTOTAL	72.5	67.3	115.0	179.5	214.9	221.6	17.3
Economic service							
Agricultural development				132.5	140.4	149.6	
Other				...	...	...	
SUBTOTAL	191.0	253.0	326.0	405.2	373.7	371.3	10.0
TOTAL	776.1	981.9	1 186.9	1 526.6	1 631.2	1 780.7	12.6
Education as a percentage of expenditures	15.4	14.8	17.1	16.7	19.2	21.0	

SOURCE United Republic of Tanzania, *Appropriation accounts.*

Projection of recurrent expenditures

It seems very unlikely that expenditures can increase in the future at the same rate as in recent years. Public revenue has increased rapidly in the past, thanks to improvements in the collection of taxes, increases in the rates of taxation and the introduction of certain new taxes. As a result, the burden of taxation has increased rapidly, and in 1971/72 government recurrent revenue already amounted to 28.1 per cent of monetary GDP. It would seem difficult to increase it much further in the future. According to the estimates previously made, recurrent revenue will amount to 3,312 million shillings in 1979/80. If it is assumed that one-third of ministries' capital expenditures (excluding the transfer to the parastatal enterprises) will have to be finan . by public savings, the amount available for recurrent expenditure will be 3,012 million shillings.

If the increase in the national debt over the period 1971–80 is taken into account, expenditure on national-debt servicing and on pensions should amount to 485 million shillings. As a result, the amount available for expenditures by all ministries taken together must not exceed 2,530 million shillings.

Expenditure on education, as estimated in the first part of this study[1] will amount to 695 million shillings in 1979/80. For this expenditure to be financed, expenditures of the other sectors of government activity will have to be in line with, for example, the projection shown in Table 68.

It is important to note that the economic-growth projection has been made at constant prices. The projection of government recurrent revenue, which is

TABLE 68. Projection of government recurrent expenditures

Expenditure	1971/72 Amount	1971/72 Percentage	Growth rate, 1971–80	1979/80 Amount	1979/80 Percentage
National debt and pensions					
National debt	238.8	13.4		440.0	14.6
Pensions	33.7	1.9		45.0	1.5
SUBTOTAL	272.5	15.3		485.0	16.1
Administration	249.7	14.0	5.2	375.3	12.5
Public order and safety	154.9	8.7	5.2	232.7	7.7
Defence	136.3	7.7	5.2	204.8	6.9
Education	374.4	21.0	8.1	695.6	23.0
Health and housing	221.6	12.4	7.0	380.7	12.6
Economic services	371.3	20.9	7.0	637.9	21.2
SUBTOTAL	1 780.7	100.0		3 012.0	100.0
Government savings	78.5			300.0	
TOTAL	1 859.2		7.5	3 312.0	

SOURCE: 1971–72: United Republic of Tanzania, *Appropriation accounts*. 1979–80: IIEP projection.

1. See above, pages 72–74.

closely linked to economic growth, has therefore also been made at constant prices. As a result, the growth rate given in the Table should be considered as growth in real terms.

The growth of educational expenditures is by far the highest one—8.1 per cent per annum. If a balance is to be achieved between revenue and expenditure, expenditures of the other sectors of government activity should increase only at a moderate rate. We have assumed for social services and economic services a relatively high increase, but this can be made possible only if expenditure on general administration, public order and safety, and defence, rise slowly, i.e. at a rate markedly less than that seen in the past.

Finally it should be noted that in our projection of educational expenditure we have assumed that the salary scale will be maintained at the present level. An increase in salaries, which could not be restricted of course to the Ministry of National Education alone, would completely upset the previously indicated balance.

123

Conclusions

The aim of this study was to consider the problems involved in the financing of education in Tanzania over the present decade. The analysis of such financing in the past shows a quite marked tendency towards an increase in the part played by the government. An effort was indeed made, during the preparation of the first plan, to transfer to the local authorities part of the expenditure on primary education. This effort was initially successful, since the share of the local authorities during the first two years of the plan increased rapidly to 40 per cent of all expenditure at this level, nearly the same as that by central government. Many local authorities, however, very quickly found themselves unable to handle this increase in their expenditure; their budget deficits increased and, in certain cases, there were long delays in the payment of teachers' salaries. In view of this situation, the government gradually increased its subsidies and, in 1968, this amounted to 75 per cent of total expenditure. At the end of 1968, in order to put an end to the difficulties facing the local authorities and to underwrite the new priority given to development of primary education, the government decided to pay all teachers' salaries directly. As a consequence of this decision, expenditure on primary education by the Ministry of National Education has practically doubled in two years (increasing from 64.2 million shillings in 1967–68 to 124.3 million shillings in 1969–70).

In 1973, school fees were abolished and the government took over both the salary and the non-salary expenditures of primary education. Thus, it can be said that all expenditure on education (except that of private non-aided schools) is financed by the government. It is for this reason that we have considered the problem of the financing of educational expenditures against the background of government revenue and expenditure.

Government revenue has increased rapidly in the past as the result of improvements in the collection of taxes, increases in taxation rates, and the introduction of a number of new taxes. This effort in taxation has made it possible to increase the share of public revenue in the monetary GDP from 18.5 per cent in 1963/64 to 28 per cent in 1969/70. Since then the percentage seems to have levelled off and it would be difficult indeed to increase it much further. Part of this revenue, however, has been used for the servicing of the national

debt. This servicing of the national debt has increased at a rate of 24 per cent per annum over the period 1964/71.

In order to analyse the development of revenue in the future, we have attempted, on the basis of the basis of the information currently available, to project economic growth over the present decade. Based on this economic growth, it is estimated that public revenue might amount to 3,312 million shillings in 1979/80, i.e. 30 per cent of the monetary GDP. This means that some increase in the burden of taxation over the present decade has been assumed.

If the teachers' salary scales are maintained at their present level, expenditure on education (including not only the expenditure of the Ministry of National Education but also that of other ministries engaged in various forms of training) may be estimated at about 700 million shillings, on the basis of the objectives fixed by the government. Bearing in mind the foreseeable increase in the cost of servicing the national debt and the need to achieve a current budget surplus so as to cover part of the financing of government capital expenditure, it is clear that the financing of this amount of expenditure on education implies that the expenditure of the other sectors of government activity should increase at a moderate rate, lower than that seen in the past. If the required recurrent budget surplus which we have just referred to and the cost of servicing the national debt are taken into account, the amount available for expenditures on all the ministries and extra-ministerial departments would be 2,500 million shillings. In other words, the share of expenditure on education would be 28 per cent as compared to 24.8 per cent in 1971/72 and only 17.2 per cent in 1964/65. In terms of total GDP at factor costs, there would be the same increasing trend (3.4 per cent in 1964/65, 4.4 per cent in 1971/72 and 5.5 per cent in 1979/80).

In addition, two apparently fundamental problems should be emphasized which could upset the previously described balance between government revenue and expenditure.

The first is that this balance can be maintained only if the present policy, which consists in restricting enrolments in secondary education to a level consistent with manpower needs and which results in fact in access to such education becoming increasingly difficult for children who have completed primary education, can be applied. The transition ratio between primary and public secondary education (including grade C teacher training), which has already decreased from 40.1 per cent in 1961 to 16.3 per cent in 1972, will have to decrease further to 6.9 per cent in 1980. How will parents react to this restriction? It would appear that in the past this policy has encouraged the development of non-aided private education. Enrolment in private non-aided secondary schools, over the period 1965–72, increased from 1,065 to 10,773, i.e. from 4.6 per cent to 24.5 per cent of total enrolment. Although the data cover only a short period, this trend would appear to be quite significant.

The second problem is that it has been assumed, in projecting expenditure on education, that teachers' salary scales will be kept at their present level. Needless to say, expenditure on education is very sensitive to teachers' salaries.

If it is assumed that salary scales will increase by 2 per cent per annum, the projected amount of expenditure on education in 1979/80 will be increased by 14 per cent. However, in Tanzania, as in other countries, teachers' salary scales form an integral part of Civil Service salary scales, so that any increase in teachers' salaries will almost automatically have an effect on the salaries of other civil servants. As a result, expenditures of all ministries will increase. In order to deal with this increase in expenditure, while preserving the balance between government revenue and expenditure, and satisfying the conditions previously mentioned, revenue must increase markedly and amount to 34 per cent of the monetary GDP. Such an increase in the burden of taxation would seem to be difficult to tolerate, especially if its effects on private consumption and price levels are borne in mind.

Will it be possible to call on other sources of finance in order to reduce the cost to the government of expenditure on education? Past experience of making the local authorities responsible for this expenditure can hardly be said to be encouraging. Also, as we have previously indicated, the present regionalization policy does not really change the picture too much. In spite of that policy nearly all expenditure on education by the regional authorities, which are responsible for primary and adult education, is met by subsidies from central government.

As far as foreign aid is concerned, apart from the sizable contribution to development expenditure, this consists essentially of payments of overseas allowances to expatriate teachers. The policy of the Tanzania Government, however, is for these expatriate teachers gradually to be replaced, a process which will have been completed by 1977 in the case of secondary education. After this date the only foreign teaching staff remaining will be in higher education. In any case this type of aid does not affect government expenditure, since the overseas allowances are over and above the salary normally paid by the Tanzania Government, which is the same as the one paid to Tanzanian teachers.

Finally, one last alternative would be to set the present objectives for education at a lower level. This is not possible in the case of secondary and higher education, since enrolments at these levels have already been projected strictly on the basis of manpower needs, which result in access to such education becoming more and more difficult for primary-school leavers. It is therefore in the case of primary education alone, and consequently of teacher training, that such a lowering of objectives would be possible. It could be done by postponing the date foreseen for the achievement of universal primary education, which is at present fixed at 1989.

Appendix

Appendix

TABLE 1. Trend of enrolment in public primary education, 1961–72

Level	1961	1964	1966
Standard I	121 386	140 341	154 512
Standard II	108 992	130 976	140 722
Standard III	97 340	122 718	135 022
Standard IV	95 391	114 471	131 499
Standard V	19 721	43 610	60 721
Standard VI	17 259	36 577	52 755
Standard VII	14 649	24 637	46 816
Standard VIII	11 732	20 348	18 946
Total	486 470	633 678	740 993
Transition ratio from standard IV to standard V (%)	21.4	40.8	48.0

SOURCE Ministry of National Education, *Educational statistics: Ten years of independence*, Dar es Salaam, 1971, and *Educational statistics handbook*, Dar es Salaam, 1973.

TABLE 2. Age distribution of enrolment in public primary schools[1], 1973

Level	Age 5	6	7	8	9	10
Standard I	277	1 826	30 583	46 312	51 886	43 456
Standard II	12	332	2 800	23 384	38 711	47 421
Standard III	—	5	452	4 472	17 357	34 510
Standard IV	—	—	5	178	2 899	15 827
Standard V	—	—	—	26	260	3 064
Standard VI	—	—	—	—	7	388
Standard VII	—	—	—	—	—	78
TOTAL	289	2 163	33 840	74 372	111 120	144 744

1. Excluding Singida region enrolment: 49,307 pupils for whom no breakdown is available.
2. This total plus the 49,307 from Singida (see note 1 above) differs slightly (by 839) from the corresponding total indicated in Table 1.

SOURCE Ministry of National Education regional statistics.

1968	1969	1970	1971	1972	1973
155 802	157 986	172 576	190 091	208 331	226 071
148 188	145 487	152 234	166 590	182 858	199 119
142 353	141 389	141 734	149 305	161 265	174 328
136 449	137 571	138 458	138 246	144 139	153 169
67 417	71 198	88 634	102 608	116 461	133 300
57 579	61 960	68 714	85 267	101 586	116 593
57 381	60 518	65 624	70 502	88 656	103 807
—	—	—	—	—	—
765 169	776 109	827 974	902 609	1 003 596	1 106 387
50.7	52.2	64.4	74.1	84.2	92.5

Age							
11	12	13	14	15	16	17	Total
22 002	11 990	6 125	1 529	277	43	8	216 314
36 309	21 764	12 575	4 427	911	235	61	188 942
39 335	34 113	22 886	9 359	3 832	594	162	167 077
30 721	37 612	31 612	16 880	7 917	2 522	535	146 708
13 651	28 264	34 696	25 539	13 479	7 059	1 740	127 778
7 110	12 236	26 464	29 509	24 346	12 183	4 391	111 634
387	2 067	11 336	24 179	27 435	21 477	12 507	99 466
144 515	148 046	145 694	111 422	78 197	44 113	19 404	1 057 919[a]

TABLE 3. Promotion, repetition and drop-out rates in public primary education

Group	Standard I	II	III	IV	V	IV	VII
1971							
Repeaters	2 156	1 436	1 216	4 279	321	394	4 513
Enrolments	190 091	166 590	149 305	138 246	102 608	85 267	70 502
1972							
Repeaters	2 429	1 512	1 181	2 865	428	517	4 187
Enrolments	208 331	182 858	161 265	144 139	116 461	101 886	88 656
1973							
Repeaters	2 276	1 286	884	1 345	428	639	4 889
Enrolments	226 071	199 119	174 328	153 169	133 300	116 593	103 807
RATES (PERCENTAGE)							
1971/72							
Promotion	95.4	96.1	94.6	83.9	98.8	99.1	—
Repetition	1.3	0.9	0.8	2.1	0.4	0.6	5.9
Drop-out	3.3	3.0	4.6	14.0	0.8	0.3	
1972/73							
Promotion	95.0	94.9	94.1	92.2	99.6	97.1	—
Repetition	1.1	0.7	0.6	0.9	0.4	0.6	5.5
Drop-out	3.9	4.4	5.3	6.9	—	2.3	—

SOURCE Ministry of National Education.

TABLE 4. Trends of enrolment in private primary education, 1969–73

Level	1969	1970	1971	1972	1973
Standard I	23 331	9 775	6 033	4 409	7 086
Standard II	18 533	7 980	5 181	3 563	5 258
Standard III	4 210	4 053	3 317	2 494	2 779
Standard IV	3 643	3 249	2 797	2 123	2 132
Standard V	1 091	933	706	658	938
Standard VI	1 050	1 054	729	732	871
Standard VII	1 199	1 150	711	727	714
TOTAL	53 057	28 239	19 474	14 346	19 778

TABLE 5. Trend of enrolment in public and private secondary education, 1963–73

	1961	1964	1966	1968	1969	1970	1971	1972	1973
Public education									
Form I	4 196	5 302	6 377	6 989	7 149	7 372	7 570	7 747	7 933
Form II	3 533	5 013	6 027	6 710	7 086	7 148	7 623	7 715	7 894
Form III	2 088	4 873	5 122	6 438	6 759	7 089	7 322	7 546	7 823
Form IV	1 603	3 630	4 723	5 763	6 328	6 713	7 044	7 052	7 371
SUBTOTAL	11 420	18 818	22 249	25 900	27 322	28 322	29 559	30 060	31 021
Form V	236	616	826	1 214	1 410	1 506	1 608	1 705	1 808
Form VI	176	463	761	929	1 226	1 389	1 436	1 523	1 673
SUBTOTAL	412	1 079	1 587	2 143	2 636	2 895	3 044	3 228	3 481
TOTAL	11 832	19 897	23 836	28 043	29 958	31 217	32 603	33 288	34 502
Private education									
Form I			2 329	2 610	2 511	3 022	3 254	3 716	4 379
Form II			728	2 404	2 108	2 562	2 832	2 780	3 267
Form III			407	1 867	1 924	2 166	2 369	2 326	2 513
Form IV			322	655	1 485	2 014	2 045	1 812	2 215
SUBTOTAL			3 786	7 536	8 028	9 764	10 500	10 634	12 374
Form V			2	18	49	149	113	104	124
Form VI			4	18	15	49	136	35	125
SUBTOTAL			6	36	64	198	249	139	249
TOTAL			3 792	7 572	8 092	9 962	10 749	10 773	12 623

TABLE 6. Trends of enrolment in adult education

Area	December 1970	December 1971	December 1972	Estimated number of illiterates	Enrolment 1972 as percentage of estimated illiterates
Arusha	14 260	33 320	72 140	283 000	25.5
Coast	13 910	93 870	284 990	332 000	85.8
Dodoma	29 170	64 170	64 170	341 000	18.8
Iringa	44 150	21 040	135 990	283 000	48.1
Kigoma	18 110	67 090	103 990	244 000	42.6
Kilimanjaro	24 410	69 230	84 860	166 000	51.1
Lindi	—	40 590	123 770	312 000	39.7
Mara	14 130	56 430	159 350	215 000	74.1
Mbeya	20 750	43 190	186 710	419 000	44.6
Morogaro	16 910	32 480	164 670	283 000	58.2
Mtwara	18 300	83 080	127 790	195 000	65.5
Mwanza	57 950	114 600	442 180	488 000	90.6
Ruvuma	24 150	38 510	104 800	146 000	71.8
Shinyanga	20 390	66 190	187 110	458 000	40.9
Singida	15 450	37 060	119 770	215 000	55.7
Tabora	11 320	35 460	104 820	273 000	38.4
Tanga	17 150	47 930	100 320	283 000	35.4
West Lake	22 730	85 900	121 130	234 000	51.8
TOTAL	363 240	1 060 140	2 688 560	5 170 000	52.0

TABLE 7. Distribution of Tanzanian students by country of study

Country	Science	Art	Total
United Kingdom	261	291	552
United States of America	66	64	130
U.S.S.R.	100	18	118
India	63	27	90
German Democratic Republic	64	8	72
Canada	22	27	49
Other countries	136	38	174
TOTAL	712	473	1 185

SOURCE Manpower Planning Division, *Annual manpower report to the President, 1971*, Dar es Salaam, September 1971.

TABLE 8. Regional reccurrent expenditures on education, 1972–73 (in thousand shillings)

Area	Administration	Primary education	Adult education	National culture	Total
Arusha	427	7 201	636	45	8 309
Coast	576	5 014	728	—	6 318
Dodoma	387	8 943	606	47	9 983
Iringa	436	8 405	545	15	9 401
Kigoma	346	5 259	563	37	6 205
Kilimanjaro	456	16 843	608	10	17 917
Lindi	309	5 660	567	17	6 553
Mara	—	8 131	550	—	8 681
Mbeya	438	12 220	668	42	13 368
Morogaro	402	10 635	574	38	11 649
Mtwara	334	6 955	686	48	8 023
Mwanza	461	12 876	2 311	38	15 686
Ruvuma	344	8 071	549	30	8 994
Shinyanga	535	9 103	597	31	10 266
Singida	345	8 142	560	10	9 057
Tabora	383	7 822	566	52	8 823
Tanga	476	13 465	727	20	14 688
West Lake	420	13 230	601	37	14 288
TOTAL	7 075	167 975	12 642	517	188 209

SOURCE Government of Tanzania, *Estimates of public revenues and expenditures*, 1973.

TABLE 9. Distribution of Tanzanian overseas students by subject

Science		Arts	
Subject	Number	Subject	Number
Engineering	258	Accountancy	265
Medicine	156	Arts degree	64
Science	118	Economics	45
Pharmacy	51	Commerce	29
Agriculture	45	Arts education	28
Lands	28	Administration management	19
Other	56	Other	23
TOTAL	712	TOTAL	473

SOURCE Manpower Planning Division, *Annual manpower report ... 1971*, op. cit.

133

TABLE 10. Trend of gross domestic product at factor cost by industrial origin at 1966 prices (in million shillings)

Sector	1964	1966	1968	1969	1970	1971	1972
Subsistence agriculture	1 377	1 550	1 660	1 588	1 615	1 662	1 752
Monetary agriculture	1 246	1 402	1 402	1 492	1 574	1500	1 614
Mining and quarrying	141	192	137	148	138	155	137
Manufacturing and handicraft	394	525	627	687	729	784	832
Electricity and water supply	51	62	72	82	91	100	112
Construction	190	222	315	293	322	375	367
Commerce	670	825	950	973	1 051	1 050	1 118
Transport and communication	387	482	618	644	730	814	845
Finance, insurance and real estate	543	569	629	660	664	683	707
Administration	620	689	764	771	865	956	1 020
TOTAL	5 619	6 518	7 174	7 338	7 779	8 079	3 504

SOURCE *The economic survey, 1972–73*, p. 7.

TABLE 11. Value added by agriculture: planned target and actual achievement, 1964–72 (in million shillings)

Sector	1964	1969	1972	First-plan target, 1964–69	Actual growth, 1964–69	Second plan target, 1969–74	Actual growth, 1969–72
				(%)	(%)	(%)	(%)
Growth at constant price							
Monetary sector	1 246	1 492	1 614	5.2	3.7	7.2	2.7
Subsistence sector	1 377	1 588	1 752	2.1	2.9	3.0	3.0
TOTAL	2 623	3 080	3 366	3.9	3.3	5.1	2.9
Growth at current price							
Monetary sector	1 448	1 444	1 834		0.0		8.3
Subsistence sector	1 342	1 630	2 122		4.0		9.2
TOTAL	2 790	3 074	3 956		2.0		8.8

SOURCE United Republic of Tanzania, *The economic survey, 1972–73*.

TABLE 12. Trend of capital formation, 1964–72 (in million shillings)

Type of investment	1964		1966		1968		1970		1972	
	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage	Amount	Percentage
MONETARY SECTOR										
Building										
Residential	36	5.3	60	6.1	83	6.3	115	6.3	121	5.3
Non-residential	114	16.9	129	13.0	186	14.1	127	12.0	222	9.7
SUBTOTAL	150	22.2	189	19.1	269	20.4	332	18.3	343	15.0
Infrastructure										
Land improvement	4	0.6	9	0.9	7	0.5	29	1.6	32	1.4
Roads	25	3.7	55	5.6	95	7.2	149	8.2	133	5.8
Water supplies	21	3.1	23	2.3	37	2.8	50	2.8	45	2.0
Other	56	8.3	76	7.7	187	14.2	281	15.5	737	32.0
SUBTOTAL	106	15.7	163	16.5	326	24.7	509	28.1	947	41.2
Equipment										
Transport	102	15.2	229	23.1	223	16.9	248	13.7	210	9.1
Other	169	25.1	260	26.2	329	25.0	556	30.6	600	26.1
SUBTOTAL	271	40.3	489	49.3	552	41.9	804	44.3	810	35.2
TOTAL	527	78.2	841	84.9	1 147	87.0	1 645	90.7	2 100	91.4
NON-MONETARY SECTOR										
Construction	101	15.0	118	11.9	133	10.1	146	8.0	176	7.7
Cattle	46	6.8	32	3.2	38	2.9	24	1.3	22	1.0
TOTAL	147	21.8	150	15.1	171	13.0	170	9.3	198	8.7
Total capital formation	674	100.0	991	100.0	1 318	100.0	1 815	100.0	2 298	100.0
Index	100		147.0		195.5		269.3		340.9	

SOURCE United Republic of Tanzania, *The economic survey, 1972–73.*

TABLE 13. Value added by the service industries: planned target and actual achievement, 1964–72 (in million shillings)

Sector	1964	1969	1972	First plan target, 1964–69	Actual growth, 1964–69	Second plan target, 1969–72	Actual growth, 1969–72
				%	%	%	%
Trade and tourism	670	973	1 118	8.0	7.8	8.0	4.7
Transport and communication	387	644	845	7.8	10.7	9.0	9.5
Finance, insurance and real estate							
Monetary sector	114	168	171		8.1		0.4
Non-monetary sector	429	492	536		2.8		2.8
SUBTOTAL	543	660	707	8.4	4.0	6.0	2.3
Other services	620	771	1 020	6.5	4.4	5.0	9.8
TOTAL	2 220	3 048	3 690	7.5	6.5	7.0	6.6

TABLE 14. Export taxes on the three main products (in thousand shillings)

Product	1966/67		1967/68	
	Amount	Percentage	Amount	Percentage
Coffee	18 800		18 500	
Cotton	4 900		5 800	
Cashew nuts	7 700		4 300	
SUBTOTAL	31 400	82.8	28 600	80.8
Other products	6 500	17.2	6 800	19.2
TOTAL	37 900	100.0	35 400	100.0

SOURCE United Republic of Tanzania, *Appropriation accounts*.

136

TABLE 15. Income tax and monetary GDP, 1963–72 (in million shillings)

Year	Income tax	Monetary GDP	Percentage of GDP
1963/64	120.4	3 813	3.2
1964/65	130.8	3 835	3.4
1965/66	153.9	4 154	3.7
1966/67	158.6	4 576	3.5
1967/68	180.0	4 840	3.7
1968/69	251.6	5 163	4.9
1969/70	254 7	5 602	4.5
1970/71	301.6	6 071	5.0
1971/72	396.2	6 624	6.0

SOURCE Computed from data of Table 12.

1968/69			1969/70			1971/72		
Amount		Percentage	Amount		Percentage	Amount		Percentage
24 000			20 100			23 000		
15 000			11 700			8 000		
4 800			10 000			8 800		
	43 800	82.6		41 800	68.2		39 800	89.4
	9 200	17.4		5 600	11.8		4 700	10.6
	53 000	100.0		47 400	100.0		44 500	100.0

IIEP book list

The following books, published by the Unesco Press, are obtainable from the Institute or from Unesco and its national distributors throughout the world:

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Educational planning: a directory of training and research institutions (1968)
Educational planning in the USSR (1968)
Financing educational systems (series of monographs: full list at front of this volume)
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Methodologies of educational planning for developing countries by J.D. Chesswas (1968)
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The new media: memo to educational planners by W. Schramm, P.H. Coombs, F. Kahnert, J. Lyle (1967. A report including analytical conclusions based on the above three volumes of case studies)
Planning the location of schools (series of monographs: full list available on request)
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Population growth and costs of education in developing countries by Ta Ngoc Châu (1972)
Research for educational planning: notes on emergent needs by William J. Platt (1970)
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Published by N.V. Martinus Nijhoff, The Hague, 1973
Managing educational costs by Philip H. Coombs and James Hallak
Published by Oxford University Press, New York, London and Toronto, 1972
Quantitative methods of educational planning by Héctor Correa
Published by International Textbook Co., Scranton, Pa., 1969
The world educational crisis: a systems analysis by Philip H. Coombs
Published by Oxford University Press, New York, London and Toronto, 1968

The International Institute for Educational Planning

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The book

The lines of development laid down by Tanzania and its effort to integrate educational policy with economic and social objectives are now well known. In this book the authors have attempted to review this educational policy, to assess its past implementation and to analyse the trends of expenditure and costs. Looking into the future, they have tried to show all the implications of this policy on the structure of the educational system, on financial requirements and on employment. In so doing, they hope to have set in a clearer perspective the problems of compatibility between educational policy and the other economic and social development objectives of the country.

The authors

The authors are both staff members of the International Institute for Educational Planning and in recent years have carried out research into educational problems and policies in various countries, particularly in Africa. Ta Ngoc Châu's publications include *Demographic Aspects of Educational Planning* (1969) and he is the principal author of *Population Growth and Costs of Education in Developing Countries* (1972). Françoise Caillods, apart from being a contributor to this latter volume, is a co-author of a study on the location of schools in Costa Rica (1975).

[B]
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